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Industrial Machinery Noise Impact Modeling
Volume II. Appendices

Bolt Beranek and Newman, Inc.
Canoga Park, CA

Prepared for

Environmental Protection Agency
Washington, DC

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The report presents the computer program developed to ascertain noise levels to which workers in foundries and sawmills are exposed. Output data from computer input are delineated.

KEYWORDS: *Foundries, *Sawmills, *Noise pollution, *Noise levels, *Noise exposure.

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INDUSTRIAL MACHINERY NOISE IMPACT MODELING
VOL. II - APPENDICES

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2<

APPENDIX A

THEORETICAL BASIS FOR THE ERROR ESTIMATES PRESENTED IN CHAPTER 6

A.1 Introduction

As mentioned in Chapter 6, there are eight important parameters which are predicted by the computer program. These parameters will be discussed in the same order here.

A.2 Total Level Weighted Population Values (Parameter 1, Chapter 6)

Let the following notation for level weighted population (LWP) values be defined:

y = true LWP value for the entire industry

y_j = true LWP value for the jth plant within the industry

y_i = computed LWP value for the ith plant in a sample of n plants from the industry

y_n = computed LWP value for a sample of n plants from the industry

m = total number of personnel in the industry

m_j = number of personnel in the jth plant within the industry

m_i = number of personnel in the ith plant in a sample of plants from the industry

3<

m_n = number of personnel in the sample

n = number of plants in sample

p = number of plants within the industry

The LWP values, y, y_j, y_i, and y_n, are directly proportional to the number of personnel, m, m_j, m_i, and m_n. Hence, the LWP values can be normalized to LWP (personnel population) as follows.

$$\begin{aligned} x &= y/m \\ x_j &= y_j/m_j \;;\; j = 1,2,3,\ldots,p \\ x_i &= y_i/m_i \;;\; i = 1,2,3,\ldots,n \\ x_n &= y_n/m_n \end{aligned} \qquad (A.1)$$

Since the normalized LWP values, x_i, each represent an average value for m_i personnel, the mean and variance of x_i; $i = 1, 2, \ldots n$, must be computed with proper weighting for the population size associated with each sample. This is readily done in the following way.

$$\bar{x} = \frac{1}{m_n} \sum_{i=1}^{n} m_i x_i \qquad s^2 = \frac{1}{m_n - 1} \sum_{i=1}^{n} m_i (x_i - \bar{x})^2 \qquad (A.2)$$

Note that due to nonlinear operations in the computations which produce the LWP values, the sample average $\bar{x}$ in Eq (A.2) will not necessarily equal the normalized LWP value x_n for all plants in the sample, as defined in Eq (A.1). Nevertheless, the sample standard deviation s constitutes a valid measure of variability in the normalized LWP values among different plants which can be used to establish confidence limits about the final predicted LWP values for the industry.

A.2.1 Confidence Limits for Industry

Given a sample of size n, a (1-α) confidence interval on the true value of the normalized LWP value x is given by [11]

$$x_n - \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \leq x \leq x_n + \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \qquad (A.3)$$

where x_n = normalized LWP value computed from Eq (A.1) for the sample of n plants (not $\overline{x}$),

s = standard deviation of normalized LWP values for individual plants computed from Eq (A.2),

$t_{n-1;\alpha/2}$ = α/2 percentage point of Student "t" variable with n-1 degrees of freedom.

Hence, the (1-α) confidence interval for the industry LWP value y = mx is obtained by multiplying Eq (A.3) by the total number of personnel in the industry, that is,

$$mx_n - \frac{ms}{\sqrt{n}} t_{n-1;\alpha/2} \leq y \leq mx_n + \frac{ms}{\sqrt{n}} t_{n-1;\alpha/2} \qquad (A.4)$$

Note that Eq (A.4) assumes n<<p, which will generally be true.

A.2.2 Prediction Limits for Individual Plants

Of interest now is the (1-α) tolerance (prediction) interval for the LWP values of individual plants within the industry, i.e., that interval about x_n which will include the normalized LWP values for at least (1-α) portion of all plants within the industry. If one is prepared to assume the normalized level weighted population values x_j are normally distributed, then tolerance limits might be generated using conventional normal tolerance tables [12]. In this case, however, the problem is complicated by the fact that the x_j values do not have a common variance. Specifically, the larger the number of personnel m_j, the closer x_j is likely to be to x_n.

Under the assumption that the sample of plants are representative of the industry, including typical numbers of personnel, some indication of the probable dispersion of normalized LWP values for individual plants is provided by the following nonparametric statement. Given a sample of n plants with normalized LWP values of x_i, $i = 1,2,\ldots,n$, it can be said that at least β portion of all values of for the industry will fall between the largest and smallest values of x_i with confidence [13]

$$\gamma = 1 - \beta^n - n(1-\beta)\beta^{n-1} \qquad (A.5)$$

For example, given a sample of $n = 10$ plants and a value of $\beta = 0.80$, it can be said that with $100\gamma = 62\%$ confidence that at least $100\beta = 80\%$ of all plants in the industry will have a normalized LWP value x_j which falls between the largest and smallest values of x_i computed for the $n = 10$ plants in the sample.

A.3 Number of Critically Exposed Personnel (Parameters 2, 3 and 4, Chapter 6)

Let the following notation be defined.

q = total number of personnel in the industry exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA)

6<

q_j = number of personnel in the jth plant within the industry exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA)

q = total number of personnel in the industry exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA)

q_i = number of personnel in the ith plant in a sample of n plants with the industry exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA)

q_n = total number of personnel in a sample of n plants within the industry exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA)

m = total number of personnel in the industry

m_j = number of personnel in the jth plant within the industry

m_i = number of personnel in the ith plant in a sample of plants within the industry

m_n = total number of personnel in a sample of n plants within the industry

n = sample size

p = number of plants within the industry.

It follows that the fractions of personnel (FOP) exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dBA) are given by

$$\begin{aligned} \theta &= q/m \\ \theta_j &= q_j/m_j \ ; \ j = 1,2,3,\ldots,p \\ \theta_i &= q_i/m_i \ ; \ i = 1,2,3,\ldots,p \\ \theta_n &= q_n/m_n \end{aligned} \qquad (A.6)$$

7<

To arrive at a mean and variance for the sample FOP values θ_i, each sample value must be weighted by the population size from which it was computed. Hence, the sample mean and variance are given by

$$\bar{\theta} = \frac{1}{m_n}\sum_{i=1}^{n} m_i\theta_i \qquad s^2 = \frac{1}{m_n-1}\sum_{i=1}^{n} m_i(\theta_i-\bar{\theta})^2 \qquad (A.7)$$

Again note that due to nonlinear operations in the computations which produce the FOP values, the sample average $\bar{\theta}$ in Eq (A.7) will not necessarily equal the overall FOP value θ_n for the sample plants, as defined in Eq (A.6). However, as before, the sample standard deviation s, computed with proper weighting as per Eq (A.7), constitutes a valid measure of variability in the FOP values among different plants.

A.3.1 Confidence Limits for Industry

Given a sample of size n, a (1-α) confidence interval on the true value of the fraction of personnel (FOP) exposed to $L_{eq}(8) > 75$ dBA (or $L_{eq}(8) > 90$ dB) is given by [11].

$$\theta_n - \frac{s}{\sqrt{n}}\, t_{n-1;\alpha/2} \leq \theta \leq \theta_n + \frac{s}{\sqrt{n}}\, t_{n-1;\alpha/2} \qquad (A.8)$$

where θ_n = FOP value computed from Eq (A.6) for the sample of n plants, (not $\bar{\theta}$)

s = standard deviation of weighted FOP values for individual plants computed from Eq (A.3)

$t_{n-1;\,\alpha/2}$ = Student "t" variable as defined in Eq (A.3).

8<

It should be mentioned that one might consider estimating confidence intervals for the FOP value θ using straightforward binomial theory. Specifically, assuming a sample size of $n > 50$, it can be shown [14] that the probability distribution of the sample fraction θ_n is closely approximated by a normal distribution with a mean value of θ and a standard deviation of

$$s_1 = \sqrt{\theta(1-\theta)/n} \qquad (A.9)$$

Under ideal conditions, the value of s_1 in Eq (A.9) should be approximately equal to the value $s/\sqrt{n}$ in Eq (A.8). Sample calculations for the data at hand, however, show that $s/\sqrt{n}$ in Eq (A.8) consistently exceeds s_1 in Eq (A.9) by up to 400%. This suggests that there are variations influencing the value θ_1 from one plant to the next which are beyond straightforward binomial sampling considerations. Hence, Eq (A.8) is believed to be a more realistic measure of accuracy.

A.3.2 Prediction Limits for Individual Plant

Prediction limits on the values of θ_j for individual plants in the industry can be generated using Eq (A.5) and the procedures described in Section A.2.1.

A.4 Level Weighted Population Values for Individual Personnel Categories (Parameter 5, Chapter 6)

Let the following notation for Level Weighted Population (LWP) values for individual personnel categories be defined:

y = true LWP value for the given personnel category totaled over the entire industry

y_j = true LWP value for the given personnel category in the jth plant within the industry

y_i = computed LWP value for the given personnel category in the ith plant in a sample of n plants from the industry

y_n = computed LWP value for the given personnel category in a sample of n plants from the industry

m = estimated number of personnel in the entire industry for the given personnel category

m_j = number of personnel in the given personnel category in the jth plant within the industry

m_i = number of personnel in the given personnel category in the ith plant in a sample of plants from the industry

m_n = number of personnel in the given personnel category in the sample of n plants

n = number of plants in sample

p = number of plants within the industry

$x = y/m$

$x_j = y_j/m_j \ , \ j = 1,2,3,\ldots,p$

$x_i = y_i/m_i \ , \ j = 1,2,3,\ldots,n$

$x_n = y_n/m_n$

Since the normalized LWP values, x_i, each represent an average value for m_i personnel, the mean and variance of x_i ; $i = 1,2,\ldots, n$, must be computed with proper weighting for the population size associated with each sample. This is readily done in the following way.

$$\bar{x} = \frac{1}{m_n} \sum_{i=1}^{n} m_i x_i \qquad s^2 = \frac{1}{m_n - 1} \sum_{i=1}^{n} m_i (x_i - \bar{x})^2 \qquad (A.11)$$

As in previous sections, the sample average $\bar{x}$ in Eq (A.11) will not necessarily equal the overall normalized LWP value x_n for each personnel category in the sample plants, but the sample standard deviation s constitutes an acceptable measure of variability in the normalized LWP values among the different plants for a given type of machine.

Given a sample of size n, a (1-α) confidence interval on the true value of the normalized LWP for a specific personnel category is given by [1]

$$x_n - \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \le x \le x_n + \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \qquad (A.12)$$

where x_n = normalized LWP value computed for the sample of n plants

s = standard deviation of the normalized LWP values for individual plants computed from Eq (A.11)

$t_{n-1;x/2}$ = Student "t" variable as defined in Eq (A.3).

The confidence limits for the level weighted population values for each category (totaled over the entire industry) is obtained by multiplying the normalized values by the estimated personnel category population for the entire industry.

A.5 Daily Noise Dose Values for Individual Personnel Categories (Parameter 6, Chapter 6)

Let the following notation for Daily Noise Dose (DND) values be defined

y = true DND value for a given personnel category used in the industry

y_i = computed DND value for that personnel category in the ith plant in a sample of n plants from the industry

y_n = computed DND value for that personnel category in the sample of n plants from the industry

m = number of personnel in the sample of n plants

m_i = number of personnel in the ith plant

m_n = number of personnel in the sample

n = number of plants in sample

$$\bar{y} = \frac{1}{m}\sum_{i=1}^{n} m_i y_i \qquad s^2 = \frac{1}{m-1}\sum_{i=1}^{n} m_i(y_i-\bar{y})^2 \qquad (A.13)$$

As in previous sections, the sample average $\bar{y}$ in Eq (A.13) will not necessarily equal the overall DND value y_n for the sample plants, but the sample standard deviation s constitutes an acceptable measure of variability in the DND values among the different plants for a given personnel category.

Given a sample of size n, a $(1-\alpha)$ confidence interval on the true value of the DND for a specific personnel category is given by [11]

$$y_n - \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \leq y \leq y_n + \frac{s}{\sqrt{n}} t_{n-1;\alpha/2} \qquad (A.14)$$

where y_n = DND value computed or the sample of n plants

s = standard deviation of the DND values for individual plants computed from Eq (A.13)

$t_{n-1;\alpha/2}$ = Student "t" variable as defined in Eq (A.3).

A.6 Normalized Priority Index Values Calculated Using Both EPA and OSHA Criteria (Parameters 7 and 8, Chapter 6)

Let the following notation for normalized priority index (NPI) values be defined

y = true NPI value for a given type of machine used in the industry

y_i = computed NPI value for that type of machine in the ith plant in a sample of n plants from the industry

y_n = computed NPI value for that type of machine in the sample of n plants from the industry

m = number of personnel in the sample of n plants

m_i = number of personnel in the ith plant

n = number of plants in the sample

The variability of the y_i values for each type of machine is actually a complicated function of the number of machines and the number of personnel exposed to the noise from the machines of that type in each plant. However, for the purposes of establishing confidence intervals on y based upon the y_n values, it will be assumed that the variability of the y_i values are related only to the number of personnel in a given plant so that the sample average and variance are then given by

$$\bar{y} = \frac{1}{m}\sum_{i=1}^{n} m_i y_i \qquad s^2 = \frac{1}{m-1}\sum_{i=1}^{n} m_i (y_i - \bar{y})^2 \qquad (A.15)$$

As in previous sections, the sample average $\bar{y}$ in Eq (A.15) will not necessarily equal the overall NPI value y_n for the sample plants, but the sample standard deviation s constitutes an acceptable measure of variability in the NPI values among the different plants for a given type of machine.

Given a sample of size n, a $(1-\alpha)$ confidence interval on the true value of the normalized priority index (NPI) for a specific type of machine is given by [11]

$$y_n - \frac{s}{\sqrt{n}}\, t_{n-1;\alpha/2} \le y \le y_n + \frac{s}{\sqrt{n}}\, t_{n-1;\alpha/2} \qquad (A.16)$$

where y_n = NPI value computed for the sample of n plants

s = standard deviation of the NPI values for individual plants computed from Eq (A.15)

$t_{n-1;\alpha/2}$ = Student "t" variable as defined in Eq (A.3).

14<

APPENDIX B

USERS GUIDE FOR COMPUTER PROGRAM

B.1 General Description

At this time the computer program is coded in Fortran IV language and exists in the form of cards, approximately 3500 in number. All of the data required for an analysis are also in the form of cards which follow the main program. The program may be run by reading the cards through a card reader located either at the Washington Computer Center or at a high speed remote terminal. This form of program use is time consuming; in the future, following completion of all program modifications, the program will be accessible from a disc file as discussed in Section 3 of this Appendix.

The most important aspect of the use of the program at this stage is the correct arrangement of the input data cards which follow the main program. The input data requirements and arrangements are discussed in the next section.

The program in its present form performs the analyses and produces the results described in this report. However there are a number of extensions and refinements which are recommended for future work and which will simplify its use and extend its usefulness. These refinements are discussed in Section 3 of this Appendix. A listing of the program in its present form is included in Section 4 of this appendix.

B.2 Input Data Requirements

The input data consists of a group of cards; the first three cards are single cards and subsequent cards are in groups, the contents of which will now be described.

The **first data card** consists of a title and job number which is to appear at the head of each table of results. Columns 1-36 inclusive contain the title and columns 37-42 inclusive contain a 6-digit job number.

The **second data card** is referred to as the option card and is a list of 30 decisions which must be made regarding the form of input and output data and the type of analysis required. In a future version of the program the number of decisions required will be reduced to 3 or 4 for a standard analysis. Non standard analyses will still be selectable when required.

Each of the 30 decisions are made by punching either a zero or a one in the appropriate column of this card. For example Column 1 corresponds to decision or option 1, column 2 corresponds to option 2, etc. Option 8 uses numbers other than zero or one, as explained below. Some of the decisions or options regarding the form of input and output data, which were considered important during the initial development of the program, are no longer relevant and to avoid confusion will not be discussed. The card columns corresponding to these decisions should be left blank. These decisions or card column numbers are the following: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 27, 29, 30. This leaves only decision or option numbers 8, 22, 23, 24, 25, 26, and 28 which need to be considered. These are discussed separately below.

> Option 8 refers to a decision concerning the number of hours per day that are worked, on average, by personnel in the industry being considered. The option value is half the number of hours worked per day.
>
> For example, if option 8 is equal to 4, then this implies an average of 8 hours are worked each day. The option value is punched in column 8 of the option card. The

largest possible value is 9, corresponding to an 18 hour work day.

Option 22 refers to a decision concerning whether or not it is desired to look at the effect of noise control, for certain types of equipment, on the exposure and equipment impacts. Option 22 is equal to zero if the effect of noise control is not to be included and is equal to one if the effect of noise control is to be included. The option value is punched in column 22 of the option card. If option 22 is made equal to one, noise reduction data will be required at the end of the input data (card group ten). This is discussed in more detail later.

Option 23 refers to input data card number four and subsequent cards (see later) which include a list of industry SIC codes and plants to be analyzed. If option 23 is set equal to zero, each industry or plant number specified in the list is treated separately. If option 23 is set equal to one all items in the list are combined together in the analysis. This provides the ability of averaging over several plants or SIC codes. The option value is punched in column 23 of the option card.

Option 24 is concerned with a decision of whether or not to group certain equipment types together into general equipment classifications in order to produce an additional listing of less detailed results which are easier to interpret. A value of zero means not to group any equipment types together and a value of one means that some equipment types are to be grouped together for an additional results listing and the details of these groupings will be included later in the input data cards (card group number nine). The option value is punched in column 24 of the option card.

Option 25 refers to a decision concerning the extrapolation of average results for several plants in a given industry, to the entire industry. A value of zero means that the results are not to be extrapolated and only average results for the plants considered are to be listed. A value of one means that the results are to be extrapolated to the entire industry on a total population basis. When a value of one is chosen the total population for the industry is included on the cards in Group 4 of the input data cards. The option value is punched in column 25 of the option card.

Option 26 allows for the possibility of replacing individual equipment types in personnel work assignments with the general equipment group which includes the individual equipment type. This may be useful in some cases where there is not much noise level data for some individual equipment types and backgrounds, but where there is sufficient data in the general classification which includes the individual equipment and background types. A value of zero for this option is usually selected and implies that the individual equipment type should not be replaced with the general equipment classification in the personnel work assignments. A value of one for this option implies that the individual equipment types are to be replaced with the general group type in the personnel work assignments. The option value is punched in column 26 of the option card.

Option 28 refers to a selection of the criteria to be used for the analysis. Up to three analyses can be selected simultaneously -- the criteria for each analysis required is punched on the third data card which is described below. A value of zero for this option automatically selects EPA criteria for the analysis. A value of one for this option selects the first analysis criteria on card 3

18<

and presents the results in the OSHA format with the selected criteria at the head of each table. A value of two for this option will produce two analyses. The first will be with EPA criteria and the results will be presented in EPA format. Thus the first analysis criteria on card 3 should be EPA criteria when option 28 equals 2. The second analysis (when option 28 = 2) is based on the second criteria on card 3 and the results are presented in OSHA format. If a value of three is chosen for option 28 then the two analyses corresponding to option 28 = 2 are done first of all as described above and in addition a third analysis is done. This third analysis is based on the third criteria on card 3 and the results are presented in OSHA format.

Note that a blank will give the same results as a zero for any given column on the option card.

The third data card contains the analysis criteria and includes three variables as listed below.

	Variable	Card Column Numbers	Format	Value for EPA Anal. (OPT28=0)	Value for OSHA Anal. (OPT28=1)	Value for Other Anal. Selection (OPT28=2,3)
First Analysis Criteria	Threshold level	1-5	Decimal	75.0	90.0	75.0
	8-hr permissible level	6-10	Decimal	75.0	90.0	75.0
	Exchange rate (dB per halving of expos. time)	11-15	Integer (last digit to be in Column 15)	3	5	3
Second Analysis Criteria	Threshold level	16-20	Decimal	0.0	0.0	User Choice
	8-hr permissible level	21-25	Decimal	0.0	0.0	User Choice
	Exchange rate (dB per halving of expos. time)	26-30	Integer (last digit to be in Column 30)	0.0	0.0	User Choice
Third Analysis Criteria	Threshold level	31-35	Decimal	0.0	0.0	User Choice
	8-hr permissible level	36-40	Decimal	0.0	0.0	User Choice
	Exchange rate (dB per halving of expos. time)	41-45	Integer (last digit to be in Column 45)	0.0	0.0	User Choice

Subsequent input data sets come in groups of two or more cards and will thus be treated in that way. The group of data cards following the third data card described above will be referred to as the fourth group of data cards.

20<

The **fourth group of data cards** consists of one or more cards terminated by a blank card. On each card prior to the blank card we list the plant number and SIC code corresponding to a plant or SIC code to be analyzed. Up to fifty different cards corresponding to fifty different SIC code-plant number combinations may be used at any one time. In addition to the SIC code and plant number, four 2 digit dates followed by a 6-digit number corresponding to the number of personnel in the plant or industry involved is included on each card. A different card is used for each different plant/SIC code combination which is to be analyzed. Each entry on each card will now be discussed in detail.

SIC Code - Columns 1 to 4

> This entry is included on each card whether a single plant or an entire industry is to be considered. The SIC code can be two, three or four digits, the least significant digit to be punched in column 4 of the card and the other digits to immediately precede it.

Plant Number - Columns 6 and 7

> This entry is a two digit code describing the plant to be analyzed, the least significant digit to be punched in column 7. If the plant number is set equal to zero or left blank, all plants contained within the SIC code in columns 1 to 4 will be analyzed and the results averaged. If the plant number is set equal to -1 then the average results for all plants contained within the SIC code will be extrapolated using as a basis the population figure in columns 21 to 26 on the same card, provided that option 25 on data card two is set equal to 1.

Dates - Columns 9, 10; 12, 13; 15, 16; 18, 19.

Date 1, columns 9 and 10.
Date 2, columns 12 and 13.

The equipment data to be used in the analysis must have been collected between and including the dates specified. Date 1 is the earlier date and Date 2 is the later date; both consist of the last two digits of the year to be considered. If these columns are left blank, all relevant data will be used in the analysis, regardless of the date on which they were collected.

Date 3 - Columns 15 and 16
Date 4 - Columns 18 and 19

The personnel job assignment data to be used in the analysis must have been collected between and including the above two dates. If these columns are left blank, all relevant data will be used in the analysis regardless of the date on which they were collected.

Industry Population - Columns 21 to 26,
last digit to be in Column 26

These columns need only be completed if Option 25 is chosen to equal one (see option card explanation). The data item required is the total population in the industry which is being considered, and is used when the average results for one or more plants is to be extrapolated to the entire industry.

Notes:

1. This fourth group of cards must be terminated with a blank card.

2. If Option 23 is set equal to one, all of the above data cards will be combined together in the analysis and the average results will be presented. This ability is particularly useful if it is desired to obtain an industry average from a limited number of plants rather than from all the plants in a given industry for which data exist.

The **fifth group of data cards** is a list of jobs, one card for each job. This group of cards is terminated with a blank card. The maximum number of cards allowed in this group is unlimited. Each card preceding the final blank card should contain the following information.

Job Code - Columns 1 to 5

The first two columns are the first two digits of the relevant SIC code; the last 3 columns contain a 3-digit job code which has not been used previously for jobs in the industry represented by the prior 2-digit code.

Job Description - Columns 7 to 26

The job description is a brief twenty letter outline.

The **sixth group of data cards** is a list of equipment types and background locations, one card for each type of equipment or background. If it is desirable to look at the exposure problem in terms of plant areas rather than in terms of equipment types then this could be a list of plant areas rather than a list of equipment types and backgrounds. The group of cards is terminated with a blank card. The maximum number of cards allowed in this group is unlimited. Each card preceding the final blank card should contain the following information.

Equipment or background code - Columns 1 to 4

This is a 4-digit numerical code unique to the background or equipment type under consideration, and independent of the industry.

Generic Name - Columns 6 to 22

This description is the general name by which the equipment or background is known and will appear in all results tables. For backgrounds the generic name is BACK/ followed by the generic name for the type of equipment which dominates it.

Equipment Type - Columns 26 to 42

This description will only appear in this list of equipment and is meant to differentiate between different equipment types with the same generic name. For example, manual or automatic.

Equipment Size/Condition Columns 46 to 62

This description also will only appear in this list of equipment and is meant to further differentiate between similar equipment types which differ in size or state of repair.

In addition to the above descriptions, the following points should be noted.

1. For operator enclosed equipment the letters /ENC are added to the Equipment Size/Condition description.

2. For fully or partially enclosed equipment the letters /ENC are added to the Generic Name description.

3. Equipment types with the same generic name (and likely to be later included in the same general classification) should be assigned consecutive I.D. codes.

The **seventh group of data cards** contains the personnel job assignment data. This group of cards is divided into blocks, one block for each plant considered. The number of blocks is equal to the number of plants for which we have data.

The first card in each data block contains the following information.

1. SIC Code - Columns 1 to 4

   This code is usually a four-digit code. If a two- or three-digit code is used, the last digit should appear in column four, and be immediately preceded by the other digit(s). This is the SIC code for the industry containing the plant where the data were collected.

2. Plant Code - Columns 6 and 7

   This two-digit code is the plant identity number for the plant where the data to follow were collected. If the plant identity number is unknown or if the data represents an average over several plants, then a zero should be used for the plant identity number.

3. Date - Columns 9 and 10

   This is a number consisting of the last two digits of the year in which the data were collected.

25<

Subsequent data cards in each data block come in pairs, one pair for each item of personnel job assignment data. The first card of each pair contains the following information.

1. 3-digit Job Code - Columns 1 to 3

   This code should identify the job with the corresponding description contained in the list of jobs (card group five).

2. 4-digit Number - Columns 20 to 23

   This number corresponds to the number of personnel in this category, the last digit should appear in Column 23 and be immediately preceded by the other digits.

3. 4-digit Equipment or Background Code - Columns 24 to 27

   This corresponds to a type of equipment operated for a significant percentage of time by personnel in this category or to a background location where personnel in this category spend some significant percentage of their time, averaged on a yearly basis. This code should be identified somewhere in the list of equipment (card group six).

4. Percent of Time - Columns 28 to 33

   This is a decimal number which indicates the average percentage of time that personnel in this category spend in the location described by the preceding equipment or background code. An accuracy of one decimal place is sufficient.

5. Items 3 and 4 above are repeated for up to four additional equipment or background codes, using the following card columns for the data.

Columns for Equipment or Background Codes (4-digit integer)	Columns for % of Time Spent (decimal number)
34-37	38-43
44-47	48-53
54-57	58-63
64-67	68-73

If there are less than five different equipment or background codes describing locations where personnel in this category spend their time, then the unused columns may be left blank.

The second card of each pair contains the following information.

1. Five repeats of items 3 and 4 above, using the following columns for the data.

Columns for Equipment or Background Codes (4-digit integer)	Columns for % of Time Spent (decimal number)
24-27	28-33
34-37	38-43
44-47	48-53
54-57	58-63
64-67	68-73

This second card should always be included. If there are no data to put on it, a zero should be punched in column 27. The total time spent at all the different locations represented by different equipment or background codes must add up to 100%.

Note that there may be more than one set of data in each block for each personnel category. The computer program will separate or combine the sets as appropriate following the guidelines in Section 5.

Each block of card pairs should be terminated with a final additional card which is blank. At the end of the final block in this group a second blank card should be added.

If an equipment code is specified for which there is no data in the eighth group of cards, then the program will printout this information, so that the user can check the data.

The maximum number of data cards allowed in this group is 300.

The eighth group of data cards contains the noise level data for equipment types and background locations. As for the seventh group, this group is divided into blocks of data, one block for each plant considered.

The first card in each data block contains the same information as the corresponding card in the seventh group of cards. This is:

SIC Code	2-4 digits,	Columns 1 to 4
Plant Number	2 digits,	Columns 6 and 7
Date	2 digits,	Columns 9 and 10

Subsequent cards contain the following information: one card for each noise level measurement.

1. 4-digit Equipment or Background Code - Columns 3 to 6

   This code should identify the appropriate background or equipment type in the list of equipment (card group six), which corresponds to the noise level measurement to follow in columns 27 to 31.

2. Equipment or Background Noise Level - Columns 27 to 31

   This is a decimal number and is the average noise level in dBA at the location characterized by the background or equipment type described by the 4-digit code in Columns 3 to 6. Note: noise levels characterized by equipment types are measured at the operator location -- other noise level measurements are backgrounds.

3. Remaining Columns on the card are left blank if the noise level is for an equipment type. If the noise level and the 4-digit code corresponds to a background measurement then these remaining columns on the card are punched with information on the equipment types which contribute to the background noise level. This information is arranged as follows:

Information Description	Card Columns	Format
Equipment Code 1	34-37	Integer
Contribution of Equipment Code 1 to Background Level	39-42	Decimal
Equipment Code 2	44-47	Integer
Contribution of Equipment Code 2 to Background Level	49-52	Decimal
Equipment Code 3	54-57	Integer
Contribution of Equipment Code 3 to Background Level	59-62	Decimal

Notes:

(1) A maximum of three equipment codes are allowed to characterize each background. Less than three may be used if desired.

(2) The total contribution from all equipment codes used must add up to one.

(3) For a primary contributor, a contribution of 0.4 signifies a weak source, 0.7 a strong source, 0.9 a very strong source, such that other sources can barely be distinguished, and 1.0 indicates a sole source.

(4) The background is identified by the generic name of the dominant equipment type, preceded by the letters BACK/.

(5) Secondary contributors must have smaller contributions than the dominant equipment type for each background measurement, otherwise a new background code should be introduced. However, the same background code and description may be used for several sets of data if the dominant equipment types belong to the same general equipment class as defined by the generic name (Card Group 6) and also by the general code defined in Card Group 9.

(6) More than one sound level measurement for the same background type is desirable, each measurement to be on a new data card. However the dominant equipment type should be in the same general equipment class for each measurement. Different secondary contributors may appear in each measurement, provided that the total number of equipment types contributing to a given background type (or code) is less than or equal to 20.

Note that there may be more than one set of data (or more than one data card) for any equipment types in a given plant.

Each block of cards (usually representing a single plant) should be terminated with a blank card. At the end of the final block in this group a second blank card should be added. A maximum of 600 data cards is allowed in this group.

The ninth group of cards is a list of equipment types which are to be grouped together because they have the same generic name. If option 24 is equal to zero this group of cards is omitted entirely; if option 24 is equal to one, then one card is used for each equipment grouping. Each card contains the following information.

1. A four digit equipment code - Columns 1 to 4

   This code corresponds to an entire classification or group of equipment and is unique to this equipment group. In the list of equipment (card group 6) the entries under Type and Size/Condition for these codes are both GENERAL.

2. Two four-digit equipment codes which represent the first and last equipment codes in a given equipment classification. The general classification includes all equipment codes which numerically lie between and include the two codes mentioned here.

   (a) The first code - Columns 6 to 9 - defines the lower boundary.

   (b) The second code - Columns 11 to 14 - defines upper boundary.

3. A 17 letter description of the general equipment classification (or generic name) characterized by the code in columns 1 to 4. This description occupies Columns 21 to 37.

4. Two two-digit dates which indicate the period in which the sound level data which we want to include in the general classification were collected. If all data are to be included, regardless of when they were collected, this entry may be left blank. The two

32<

digits used to characterize the dates are the last two digits of the year in which the data were collected.

(a) The first date - Columns 56 and 57 - is the earliest date to be included.

(b) The second date - Columns 60 and 61 - is the latest date to be included.

5. SIC Code - Columns 64 to 67

This is the code for the industry to be associated with the general equipment classification. If a two- or three-digit code is used, the last digit should appear in Column 67 and the other digits should immediately precede it. A two-digit code implies that the broadest classification possible is desired and data for all equipment having the same first 2 digits for the SIC code will be included.

This group of cards is terminated with a blank card. A maximum of fifty cards is allowed in this group.

The tenth group of cards is a list of noise reduction data to be used if it is desired to look at the effect of noise reduction on particular equipment types. This group is only included if the value of option 22 is one. Each data card contains the following information.

1. Two 4-digit equipment codes

All equipment types with codes lying numerically between and including these codes are to be considered.

(a) The first code - Columns 1 to 4 - defines the lower boundary.

(b) The second code - Columns 7 to 10 - defines the upper boundary.

2. Two-digit attenuation value - Columns 13 and 14

This value in dBA is a whole number and is the noise reduction to be applied to the equipment types identified in the previous columns of this card. If only a single digit number is used it should appear in column 14.

Noise reductions are automatically applied to a background level if an equipment type to be treated contributes to that level. The noise reductions applied to the background level are determined from the contribution of the equipment type to be treated and the amount of noise reduction to be applied to that equipment type. After noise reduction, the contributions of each equipment type to the background level are recalculated. This is described in detail in Section 3 of this report.

Up to 50 cards may be used in this group, each card to represent a different range of equipment codes. This card group should be terminated with a blank card.

The input data set should finally be terminated with a card with a / punched in column 1 and a * punched in column 2.

Sample forms which may be used for field collection of data and from which data cards may be punched directly are included in Section 4 of this report.

B.3 Proposed Refinements and Additions to Computer Program

The refinements and additions discussed here are referred to in a general sense in the main body of the report in Section 7 titled "Recommendations for Future Work". Each is discussed separately and in detail below.

1. Establishment of a data bank on disc file or magnetic tape. The data bank would contain List of Jobs data, List of Equipment data, Equipment and Background Noise data and Personnel Work Assignment data for plants in each industry of interest. The size of this data bank would be unlimited and new data could be added as it is collected. A method will be established whereby the data bank is not destroyed if there is a computation error or malfunction when new data are being added. The inclusion of total industry populations for each industry for which data exists will also be allowed for.

   The purpose of this inclusion is so that eventually a program user could use the data bank to make predictions for a given industry, with no prior knowledge necessary.

2. Alterations in the main computer program to allow the use of the data bank. The program would have to be modified to allow the following options:

   (a) Use of data bank data only for an analysis

   (b) Use only of data included in the input data cards at the end of the main program - no data bank data for an analysis.

(c) Addition of input data to the data bank. This will probably be a separate program which will produce no analysis results, but which would arrange the data appropriately and print out the data which is being added to the data bank. The ability to update total industry populations will also be included.

In addition, the program will be modified to allow the use of either data bank data or input data cards to determine the total population of the industry to be analyzed.

The program will also be written such that any total population data included in card group four will automatically override the data bank data.

3. Alterations to the main program to minimize the number of decisions required on the user's part, and to allow some results to be obtained just by specifying a SIC code and plant number and by making no decisions at all. If different or more detailed results are required, then the user can utilize his option to make some simple decisions.

4. Addition of a third alternative to Option 25. This will allow a more detailed and accurate extrapolation of average plant data to an entire industry. Instead of doing the extrapolation on a total industry population basis, it may be done on the basis of total populations in each personnel category. These populations could best be determined by sending questionnaires to a large percentage of plants in any given industry.

36<

5. Addition of a third alternative to option 22. At this time option 22 allows the effect of specified noise reductions for any number of equipment types to be calculated. The proposed third alternative would allow the calculation of the effect of introducing maximum noise level specifications for any number of equipment types. This alternative would be particularly useful in evaluating the effect on personnel noise exposure impact of any proposed regulations regarding maximum permissible noise levels for certain equipment types.

6. Inclusion of the ability to take into account different magnitudes of average daily working hours for different personnel categories in the same industry.

7. Capability of looking at the effect of a four day week or variations thereof on the exposure and equipment impacts for a given industry.

8. Provision of an iteration procedure on the equipment impact list which will lead to the determination of minimum noise reduction requirements to obtain compliance with

   a) EPA criteria and
   b) OSHA criteria.

   The iteration procedure will also have the capability of excluding any equipment for which noise control is impractical or technically not feasible.

9. Establishment of a data bank containing equipment noise reduction cost estimates in dollars per dB for noise reduction on various equipment types and the use of

this data bank to estimate the cost of obtaining compliance in a given industry. In addition to cost data, data will be needed for the estimated total number of items of equipment of each type in each industry. These latter data may be obtained by using a survey questionnaire sent to a certain percentage of plants in each industry.

Eventually the cost and equipment data will be updated on a yearly basis using numerical factors based on rises in the CPI, and industry expansion rate.

10. Finally the program will be stored on disc at the Washington Computer Center for easy access and to alleviate the necessity to read in 3500 cards for each analysis. The program on disc will be accessible using either a low speed teletype/video terminal or a high speed terminal with a card reader and printer.

    (a) The low speed terminal access will be most suitable for initiating an analysis requiring only the use of data in the data bank.

    (b) The high speed terminal access will be best for printing results and for initiating jobs which require the addition of data to the data bank or the use of data not yet included in the data bank.

    (c) Provision will also need to be made to enable the program to be updated as changes or additions are required.

B.4 Program Listing, April 1980

The program consists of a main program and 13 subroutines which are listed in the following pages.

```
       IMPLICIT INTEGER (O)
       REAL L8I,L8IWC,LWP,LWPWC,LWPJ,LWPWCJ,LWPN,LWPWCN,JCODE3*8,JCOD   *8
      1,MC*8
       COMMON/COSHA/ SWH(10),SLEVWC(10),              JDES(5),M(10),H(10),
      1MS(10),NEXPWC,    JCODE(5),LWPJ(500),LWPN(500),NEXP,LADD
      7,KDATA(5)
       COMMON/EMC/MCODE(5),MNAME(5),IDATE
       COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
      1JTC(150),JTC2(150),AINC,OY,ANTH,EQLV,MEN,MACC
       COMMON/LMIX/LMAX(150),LCOD1(150,10)
       COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
       COMMON/EQ2/ALEQ3(500),STDM3(500),KNAME2(500,5),JARR3(500),
      1JSEQ3(500)
       COMMON/OD/MAC1(500),MAC2(50),MAC3(50),JCODE2(50),NSC(50)
       COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
       COMMON/ITSDE/ ITST(50),UPT(30),MTST(50)
       COMMON/NWC/LWP(500),LWPWC(500),NT90,NW90,NT75,NW75,MTTU,LSTO(500),
      1KSTO(500),L8I(500),L8IWC(500),SUM,SUMWC,LNT90,LNT75,LNW90,LNW75,
      2AL82(500),AL82WC(500),ALVP(500),ALVPWC(500),NUMP(500),JOBC(500),
      3NSTO(500),MSTO(500),NJ(500),JE,ORD(500),JBDES2(50,5),RSUM,RSUMWC
       COMMON/ISICP/ICS(20),IPS(20,50),IND(20)
       COMMON/IDS1/IDS(500)
       COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
       COMMON/NCOM/NOM(10000)
       COMMON/ISORT/KKP(600),KSIC3(600)
       COMMON/ISORD/ ORD2(600),NPEOP(600),MOLT1(600)
       DIMENSION             MOLT(50),          MTYPE(5),MSIZE(5),
      1KNAME(5),KTYPE(5),KSIZE(5),              JMAC(5),JBDES1(600,5),
      2JCODE1(500),JM1(300,10),HJ1(300,10),KN(300),KJD(600),
      3LDATA(5),                                 KSIC4(600),ALEQ1(600),
      4JDEC(5),KNS(50),                MCR1(50),MCR2(50),MATT(50),ALCO(50),
      5STD0(50),ALQ1(50),STD1(50),KMAC(5),    KD1(50),KD2(50),
      6JSTO(600),JCODE3(600),BUM(10,30,5)
       DATA KMAC/4H    ,4H    ,4H    ,4H    ,4H    /
       DATA JMAC/4HNOT ,4HIN L,4HIST ,4HOF E,4HQUIP/
       DATA JDEC/4HNOT ,4HIN L,4HIST ,4HOF J,4HOBS /
       DATA LDATA/4HBACK,4H. ON,4HLY C,4HONTR,4H.   /
       DO 2 J=1,5
       KDATA(J)=LDATA(J)
     2 CONTINUE
       READ(5,5011) (NAME(J),J=1,9),JBNJNO
       REWIND 11
       REWIND 12
       REWIND 21
       REWIND 31
       REWIND 40
       REWIND 50
       LC=1
      NLN=40
      DO 5 II=1,10000
      NOM(II)=0
    5 CONTINUE
      J3=0
      OPTST=0
      NTP= 11
      LC=0
      NMB=0
      NFMC=11
      NFWC=21
      NBT=0
      NPLT=1
      READ(5,5001) (OPT(J),J=1,30)
      WRITE(6,6061)
      DO 6 I=1,30
      IA=OPT(I)+1
      WRITE(6,6062) I,OPT(I)
    6 CONTINUE
      IF(OPT(22).EQ.0.OR.OPT(27).EQ.0)GO TO 42
      WRITE(6,6504)
      STOP
   42 CONTINUE
C
C     READ IN THRESHOLD, 8-HOUR EQUIVALENT PERMISSIBLE LEVEL, AND
C     FINALLY THE EXCHANGE RATE, DB PER HALVING OF EXPOSURE TIME
C     PRINT THESE VALUES FOLLOWING LIST OF PLANTS
      READ(5,5501) ANTH1,EQLV1,NEN1,ANTH2,EQLV2,NEN2,ANTH3,EQLV3,NEN3,
     1AINC,NACC
      WRITE(6,6514)
      WRITE(6,6513)
      WRITE(6,6505)
      WRITE(6,6501)ANTH1,EQLV1,NEN1
      IF(NEN2.EQ.0)GO TO 11
      WRITE(6,6513)
      WRITE(6,6506)
      WRITE(6,6501) ANTH2,EQLV2,NEN2
      IF(NEN3.EQ.0)GO TO 11
      WRITE(6,6513)
      WRITE(6,6507)
      WRITE(6,6501)ANTH3,EQLV3,NEN3
   11 CONTINUE
      IF(OPT( 7).EQ.1)GO TO 30
      WRITE(6,6002)
   10 READ(5,5002) NSIC(NPLT),NPL(NPLT),ND1(NPLT),ND2(NPLT),ND3(NPLT),
     1ND4(NPLT),NPPP(NPLT),(SNAME(NPLT,J),J=1,7)
      IF(NSIC(NPLT).EQ.0)GO TO 35
      MOLT(NPLT)=1
      IF(NSIC(NPLT).LT.1000)MULT(NPLT)=10
      IF(NSIC(NPLT).LT. 100)MULT(NPLT)=100
      WRITE(6,6005)NSIC(NPLT),NPL(NPLT),ND1(NPLT),ND2(NPLT),ND3(NPLT),
     1ND4(NPLT),NPPP(NPLT),(SNAME(NPLT,J),J=1,7)
      NSIC(NPLT)=NSIC(NPLT)*MULT(NPLT)
      NPLT=NPLT+1
      GO TO 10
   35 NPLT=NPLT-1
      WRITE(6,6003) NPLT
      GO TO 37
   30 READ(5,5002) IDUM,IDUM1,ND1(1),ND2(1),ND3(1),ND4(1),NPPP(1)
      WRITE(6,6004) ND1(1),ND2(1),ND3(1),ND4(1),NPPP(1)
   37 CONTINUE
      DO 40 J=1,30
      IF(J.EQ.28.OR.J.EQ.8.OR.J.EQ.21.OR.J.EQ.25)GO TO 40
      IF(OPT(J).NE.0.AND.OPT(J).NE.1)GO TO 50
   40 CONTINUE
      IF(OPT(28).GT.3)GO TO 51
      IF(OPT(8).NE.4.AND.OPT(8).NE.5.AND.OPT(8).NE.6)GO TO 52
      IF(OPT(25).NE.0.AND.OPT(25).NE.1.AND.OPT(25).NE.2.AND.OPT(25).NE.3
     1)GO TO 54
      IF(OPT(21).NE.0.AND.OPT(21).NE.1.AND.OPT(21).NE.2)GO TO 56
      GO TO 60
   50 WRITE(6,6001) J,OPT(J)
      STOP 1
   51 WRITE(6,6048) OPT(28)
      STOP 1
   52 WRITE(6,6045) OPT(8)
      STOP 1
   54 WRITE(6,6046) OPT(25)
      STOP 1
   56 WRITE(6,6047) OPT(21)
      STOP 1
   60 IF(OPT(23).NE.0)WRITE(6,6006)
  135 READ(5,5003) JC,(JDES(J),J=1,5)
      IF(JC.EQ.0)GO TO 165
      WRITE(9) JC,(JDES(J),J=1,5)
      WRITE(11)JC,(JDES(J),J=1,5)
      GO TO 135
  165 CONTINUE
      END FILE 11
      REWIND 11
  205 READ(5,5004) MB,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),(MSIZE(L),L=1,
     15)
      IF(MB.EQ.0)GO TO 240
      WRITE(12)MB,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),(MSIZE(L),L=1,5)
      GO TO 205
  240 CONTINUE
```

```
      END FILE 12
      REWIND 12
      JT=0
  290 READ(5,5005) KSIC,KPL,JDATE
      IF(KSIC.EQ.0)GO TO 410
      MLT1=1
       IF(KSIC.LT.1000)MLT1=10
       IF(KSIC.LT. 100)MLT1=100
      KSIC=KSIC*MLT1
  300 READ(5,5006) JN,JNP,(M(JJ),H(JJ),JJ=1,5)
      IF(JN.EQ.0)GO TO 290
      READ(5,5007) (M(JJ),H(JJ),JJ=6,10)
      JCD=JN+1000*(KSIC/100)
  310 READ(11,END=320) JBC,(JDES(J),J=1,5)
      IF(JBC.EQ.JCD)GO TO 340
      GO TO 310
  320 DO 330 J=1,5
      JDES(J)=JDEC(J)
  330 CONTINUE
  340 CONTINUE
      JT=JT+1
      IF(JT.LE.300) GO TO 350
      WRITE(6,6010)
      STOP 3
  350 JCODE1(JT)=JN+KPL*1000+KSIC*100000
      MOLT1(JT)=MLT1
      KKP(JT)=JN
      KSIC3(JT)=KSIC/10
      KN(JT)=JNP
      KJD(JT)=JDATE
      DO 360 J=1,5
      JBDES1(JT,J)=JDES(J)
  360 CONTINUE
      DO 370 J=1,10
      JM1(JT,J)=M(J)
      HJ1(JT,J)=H(J)
  370 CONTINUE
      REWIND 11
      GO TO 300
  410 CALL JOBSRT(JSTO,JT)
  415 DO 420 INB=1,JT
      WRITE(NFWC) JCODE1(JSTO(INB)),(JBDES1(JSTO(INB),J),J=1,5),
     1KN(JSTO(INB)),(JM1(JSTO(INB),JJ),HJ1(JSTO(INB),JJ),JJ=1,10),
     2KJD(JSTO(INB)),MOLT1(JSTO(INB))
  420 CONTINUE
      JC=0
      END FILE NFWC
      REWIND NFWC
      IF(NBT.NE.0)GO TO 510
      NBT=1
      NFWC=40
      CALL JOBST1(JSTO,JT,JCODE1)
      GO TO 415
  510 CONTINUE
C   WE HAVE NOW READ  FROM INPUT OR DATA BANK, THE LOJ DATA,THE LOE DATA
C   AND THE WORKER CATEGORY DATA
C   THIS DATA HAS BEEN STORED ON DISK TEMPORARILY FOR USE IN THIS
C   PROGRAM AND ON MAG TAPE 9 FOR FUTURE USE
C
C   NEXT WE REMEMBER THE DATA BASE FOR EACH LINE OF SIC CODE, PLANT NO
C   DATE DATA
C
      DO 540 I=1,NPLT
      IF(NPL(I).LE.0)GO TO 530
      ITST(I)=4
      NTST(I)=NPL(I)
      GO TO 540
  530 NTST(I)=100*(NSIC(I)/100)
      ITST(I)=1
      IF(NTST(I).EQ.NSIC(I).AND.MOLT(I).EQ.100)GO TO 540
      NTST(I)=10*(NSIC(I)/10)
      ITST(I)=2
      IF(NTST(I).EQ.NSIC(I).AND.MOLT(I).EQ. 10)GO TO 540
      ITST(I)=3
      NTST(I)=NSIC(I)
  540 CONTINUE
C
C   NEXT WE WRITE OUT LOJ, LOE AND WORKER CATEGORY DATA AS REQUIRED
C   BY THE OPTION CARD
C
      IF(OPT( 9).NE.0)GO TO 580
  545 CONTINUE
      WRITE(6,6015) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6016)
      IT=1
  550 READ(11,END=570) JC,(JDES(J),J=1,5)
      IF(IT.GE.40)GO TO 560
      WRITE(6,6017) JC,(JDES(J),J=1,5)
      IT=IT+1
      GO TO 550
  560 WRITE(6,6017) JC,(JDES(J),J=1,5)
      GO TO 545
  570 REWIND 11
  580 CONTINUE
      IF(OPT(10).NE.0)GO TO 630
  590 CONTINUE
```

```
      WRITE(6,6015) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6018)
      IT=1
  600 READ(12,END=620) MB,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),(
     1MSIZE(L),L=1,5)
      IF(IT.GE.40)GO TO 610
      WRITE(6,6019)  MB,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),(MSIZE(L),L=
     11,5)
      IT=IT+1
      GO TO 600
  610 WRITE(6,6019)  MB,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),(MSIZE(L),L=
     11,5)
      GO TO 590
  620 REWIND 12
  630 CONTINUE
      IT=1
      IF(OPT(13).NE.0)GO TO 700
      IB=1
      KSIC1=0
      KPLT1=0
      JDATE1=0
  680 IF(IT.GT.JT)GO TO 700
      KSIC=JCODE1(JSTO(IT))/100000/MOLT1(JSTO(IT))
      KPLT=JCODE1(JSTO(IT))/1000-100*(JCODE1(JSTO(IT))/100000)
      KJOB=JCODE1(JSTO(IT))-1000*(JCODE1(JSTO(IT))/1000)
      JDATE=KJD(JSTO(IT))+1900
      IF(KSIC.EQ.KSIC1.AND.KPLT.EQ.KPLT1.AND.JDATE.EQ.JDATE1.AND.IB.LE
     1.38)GO TO 690
      WRITE(6,6015) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6020)
      IB=1
      WRITE(6,6022) KSIC,KPLT,JDATE
      WRITE(6,6023)
  690 WRITE(6,6024) KJOB,(JBDES1(JSTO(IT),J),J=1,5),KN(JSTO(IT)),
     1(JM1(JSTO(IT),JJ),HJ1(JSTO(IT),JJ),JJ=1,3)
      IB=IB+1
      KX=JM1(JSTO(IT),4)
      IF(KX.EQ.0)GO TO 695
      IB=IB+1
      WRITE(6,6051)(JM1(JSTO(IT),JJ),HJ1(JSTO(IT),JJ),JJ=4,6)
      KY=JM1(JSTO(IT),7)
      IF(KY.EQ.0)GO TO 695
      IB=IB+1
      WRITE(6,6051)(JM1(JSTO(IT),JJ),HJ1(JSTO(IT),JJ),JJ=7,9)
      KZ=JM1(JSTO(IT),10)
      IF(KZ.EQ.0)GO TO 695
      IB=IB+1
      WRITE(6,6051) JM1(JSTO(IT),10),HJ1(JSTO(IT),10)
  695 CONTINUE
      WRITE(6,6052)
      KSIC1=KSIC
      KPLT1=KPLT
      JDATE1=JDATE
      IB=IB+1
      IT=IT+1
      GO TO 680
  700 CONTINUE
C   NOW WE READ EQUIPMENT DATA FROM INPUT AND DATA BANK AND STORE IT
C   ON FILE FOR USE IN THIS PROGRAM
C
  730 JM=0
      KJB=0
      LD=0
  740 READ(5,5005) KSIC,KPL,KD
      IF(KSIC.EQ.0)GO TO 820
      MLT1=1
       IF(KSIC.LT.1000)MLT1=10
       IF(KSIC.LT. 100)MLT1=100
      KSIC=KSIC*MLT1
  750 READ(5,5008) MJC,ALEQ,(LCODE(J),DEC(J),J=1,3)
      IF(MJC.EQ.0)GO TO 740
  760 READ(12,END=770) MB ,(MNAME(J),J=1,5),(MTYPE(K),K=1,5),
     1(MSIZE(L),L=1,5)
      IF(MB .EQ.MJC)GO TO 790
      GO TO 760
  770 DO 780 J=1,5
      MNAME(J)=JMAC(J)
      MTYPE(J) =KMAC(J)
      MSIZE(J) =KMAC(J)
  780 CONTINUE
  790 CONTINUE
      JM=JM+1
      IF(JM.LE.600)GU TO 800
      WRITE(6,6013)
      STOP 3
  800 CONTINUE
      JCHK(JM)=0
      IF(LCODE(1).EQ.0) GO TO 805
      KJB=KJB+1
      DO 802 J=1,3
      LCD1(KJB,J)=LCODE(J)
      DCD1(KJB,J)=DEC(J)
  802 CONTINUE
      JCHK(JM)=KJB
  805 CONTINUE
      JCODE3(JM)=DFLOAT(MJC+KPL*10000)+DFLOAT(KSIC)*1000000.0
      KKP(JM)=MJC
      KSIC4(JM)=KSIC
      MOLT1(JM)=MLT1
      KJD(JM)=KD
      ALEQ1(JM)=ALEQ
      DO 810 J=1,5
      JBDES1(JM,J)=MNAME(J)
  810 CONTINUE
      REWIND 12
      GO TO 750
  820 CONTINUE
      CALL JOBST1(JSTO,JM,KKP)
      WRITE(6,6052)
  825 DO 830 INB=1,JM
      LD=JCHK(JSTO(INB))
      IF(LD.EQ.0) GO TO 827
      DO 826 J=1,3
      LCODE(J)=LCD1(LD,J)
      DEC(J)=DCD1(LD,J)
  826 CONTINUE
      GO TO 829
  827 CONTINUE
      DO 828 J=1,3
      LCODE(J)=0
      DEC(J)=0.0
  828 CONTINUE
  829 CONTINUE
      WRITE(NFMC) JCODE3(JSTO(INB)),(JBDES1(JSTO(INB),J),J=1,5),
     1ALEQ1(JSTO(INB)),(LCODE(J),DEC(J),J=1,3),KJD(JSTO(INB))
     1,MOLT1(JSTO(INB))
  830 MC=0
      END FILE NFMC
      REWIND NFMC
      IF(NMB.NE.0)GO TO 930
      NMB=1
      NFMC=40
      CALL JOBST3(JSTO,JM,JCODE3)
      GO TO 825
  930 CONTINUE
C
C    WE HAVE NOW READ FROM INPUT OR DATA BANK, THE EQUIPMENT DATA WHICH
C    HAS BEEN STORED TEMPORARILY ON DISK FOR USE IN THIS PROGRAM
C
C    NOW WE CALCULATE ANY NOISE REDUCTION      DATA AND STORE IT ON
C    DISK AND THEN WRITE ALL OUR MACHINE DATA ON TAPE 9
C    WE NOW READ       GENERALISED MACHINE DATA IF SO REQUIRED
      NSUB=0
      IF(UPT(24).EQ.0)GO TO 708
      IF(OPT(7).NE.0)NSUB=1
      LC=1
      WRITE(6,6576)
  702 CONTINUE
      READ(5,5010) MAC1(LC),MAC2(LC),MAC3(LC),(JBDES2(LC,J),J=1,5),
     1             KD1(LC),KD2(LC),NSC(LC)
      IF(MAC1(LC).EQ.0)GO TO 704
      JCODE2(LC)=1
      IF(NSC(LC).LT.1000)JCODE2(LC)=10
      IF(NSC(LC).LT. 100)JCODE2(LC)=100
      WRITE(6,6577) MAC1(LC),MAC2(LC),MAC3(LC),(JBDES2(LC,J),J=1,5)
      LC=LC+1
      GO TO 702
  704 CONTINUE
      LC=LC-1
  708 CONTINUE
C   READ IN EQUIPMENT CODES WHICH ARE TO BE CONSIDERED TOGETHER IN A
C   NOISE REDUCTION ITERATION PROCEDURE.READ IN AFTER LIST OF PLANTS
C   MAXIMUM OF 100 LINES OF DATA WITH A MAXIMUM OF 10 ITEMS IN EACH
C     IF(OPT(27).EQ.0)GO TO 39
      IF(OPT(30).EQ.0)GO TO 39
      WRITE(6,6502)
      OY=0
   38 CONTINUE
      OY=OY+1
      READ(5,5502) LMAX(OY),(LCOD1(OY,J),J=1,10)
       IF(LMAX(OY).EQ.0)GO TO 941
      LJ=LMAX(OY)
      WRITE(6,6503) (LCOD1(OY,J),J=1,LJ)
 6503 FORMAT(12X,10(I4,2X))
      GO TO 38
  941 CONTINUE
      OY=OY-1
   39 CONTINUE
      IF(OPT(22).EQ.0)GO TO 1030
      WRITE(6,6071)
      LK=1
  940 READ(5,5009) MCR1(LK),MCR2(LK),MATT(LK)
      IF(MCR1(LK).EQ.0)GO TO 950
      WRITE(6,6072) MCR1(LK),MCR2(LK),MATT(LK)
      LK=LK+1
      GO TO 940
  950 LK=LK-1
      LB=0
  955 READ(11,END=990) MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      MCOD=IDINT(MC-10000.0*DFLOAT(IDINT(MC/10000.0))+0.1)
      IF(LCODE(1).EQ.0) GO TO 965
      INDEX=0
      DO 975 LA=1,LK
      DO 977 J=1,3
      IF(LCODE(J).LT.MCR1(LA).OR.LCODE(J).GT.MCR2(LA)) GO TO 977
      INDEX=1
      DEC(J)=DEC(J)/10.0**(MATT(LA)/10.0)
  977 CONTINUE
      IF(INDEX.EQ.0) GO TO 975
      ALEQ=10.0*ALOG10(DEC(1)*10.**(ALEQ/10.0)
     1+DEC(2)*10.0**(ALEQ/10.0)+DEC(3)*10.0**(ALEQ/10.0))
      DECTOT=DEC(1)+DEC(2)+DEC(3)
      DO 978 J=1,3
      DEC(J)=DEC(J)/DECTOT
  978 CONTINUE
  975 CONTINUE
      GO TO 985
  965 CONTINUE
      DO 960 LA=1,LK
      IF(MCOD.GE.MCR1(LA).AND.MCOD.LE.MCR2(LA))GO TO 970
  960 CONTINUE
      GO TO 985
  970 CONTINUE
      ALEQ=ALEQ-MATT(LA)
  985 WRITE(12) MC,(MNAME(J),J=1,5),ALEQ,      (LCODE(J),DEC(J),J=1,3)
     1,IDATE,MLT1
      GO TO 955
  990 END FILE 12
      REWIND 12
      REWIND 11
 1030 CONTINUE
      LB=1
C   WE ARE NOW READY TO WRITE THE EQUIPMENT DATA EXCLUDING THE GENERALISED
C   DATA ON TO MAG TAPE 9
      LF=0
      LT=11
 1085 READ(LT,END=1160) MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      WRITE(9)          MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      GO TO 1085
 1160 CONTINUE
      REWIND LT
      MC=0.
      WRITE(9) MC,(MNAME(J),J=1,5),ALEQ,      (LCODE(J),DEC(J),J=1,3),
     1IDATE
     1,MLT1
      IF(LT.EQ.40)GO TO 1170
      LT=40
      LB=1
      GO TO 1085
 1170 CONTINUE
      END FILE 9
C    WE CAN NOW WRITE OUT THE EQUIPMENT INPUT DATA AND DATA BANK DATA
C    AS REQUIRED
C
      IF(OPT(11).NE.0)GO TO 1200
      KSIC1=0
      KPLT1=0
      JDATE1=0
      JJB=0
      IB=1
      IT=0
      ICT=0
      IDST=0
 1180 CONTINUE
      IT=IT+1
      IF(IT.GT.JM) GO TO 1182
      KSIC=KSIC4(JSTO(IT))
      KPLT=IDINT(JCODE3(JSTO(IT))/10000.0)-KSIC*100
      KSIC=KSIC/MULT1(JSTO(IT))
      JDATE=KJD(JSTO(IT))+1900
      IF(JCHK(JSTO(IT)).EQ.0) GO TO 1185
      JJB=JJB+1
      JTC(JJB)=JSTO(IT)
 1185 CONTINUE
      IF(KSIC.EQ.KSIC1.AND.KPLT.EQ.KPLT1.AND.JDATE.EQ.JDATE1.AND.IB.LE
     1.40)GO TO 1190
      IF(KSIC1.EQ.0)GO TO 1187
      IF(JCHK(JSTO(IT)).EQ.0)GO TO 1182
      JJB=JJB-1
      IT=IT-1
      IDST=1
C     NOW WRITE OUT BACKGROUND DATA.
 1182 CONTINUE
      IF(JJB.EQ.0)GO TO 1188
      JJ=1
 1183 CONTINUE
      WRITE(6,6015) (NAME(J),J=1,9),JBNJNO
      IB=1
      WRITE(6,6626)
      WRITE(6,6022) KSIC1,KPLT1,JDATE1
      WRITE(6,6628)
      K=JJ
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       DO 1189 JJ=K,JJB
       IB=IB+1
       JW=JTC(JJ)
       KJB=JCHK(JW)
       WRITE(6,6629) KKP(JW),(JBDES1(JW,J),J=1,5),
      1ALEQ1(JW),(LCD1(KJB,J),DCD1(KJB,J),J=1,3)
       IF(IB.GT.40) GO TO 1183
  1189 CONTINUE
  1188 CONTINUE
       JJB=0
       IF(IT.GT.JM)GO TO 1200
  1187 CONTINUE
       WRITE(6,6015) (NAME(J),J=1,9),JBNJNO
       WRITE(6,6026)
       IB=1
       WRITE(6,6022) KSIC,KPLT,JDATE
       WRITE(6,6028)
       IF(ICT.EQ.0)GO TO 1190
       ICT=0
       GO TO 1180
  1190 CONTINUE
       KSIC1=KSIC
       KPLT1=KPLT
       JDATE1=JDATE
       IF(JCHK(JSTO(IT)).NE.0) GO TO 1180
       IF(IDST.EQ.0)GO TO 1191
       IDST=0
       GO TO 1180
  1191 CONTINUE
       KMCC=KKP(JSTO(IT))
       WRITE(6,6029) KMCC,(JBDES1(JSTO(IT),J),J=1,5),ALEQ1(JSTO(IT))
       IB=IB+1
       IF(IB.LT.40)GO TO 1180
       ICT=1
       GO TO 1187
  1200 CONTINUE
C
C    WE HAVE NOW WRITTEN OUT EQUIPMENT DATA
C
       OPTST=0
       NTP=11
  1245 NPLT1=1
       IF(OPT(7).NE.0)GO TO 1250
       NPLT1=NPLT
  1250 KBT=0
       IF(OPT(23).EQ.1)NPLT1=1
       NTST3=0
       JADD=1
      NTST1=0
      NTST2=0
      LADD=1
      NDT1=0
      NDT2=0
      LKTST=0
      ALEQ=0
      KTST2=1
      KTST1=500000
      DO 2000 I=1,NPLT1
      ANTH=ANTH1
      EQLV=EQLV1
      NEN=NEN1
      NTRIC=0
 1252 CONTINUE
      DO 1255 IJ=1,100
      JCHK(IJ)=0
      JTC(IJ)=0
      JTC2(IJ)=0
 1255 CONTINUE
      DO 1256 IJ=101,600
      JCHK(IJ)=0
 1256 CONTINUE
      NOP=0
      MSUP=0
      MKSIC=100*(NSIC(I)/100)
 1260 CONTINUE
      NDT1=ND1(I)
      NDT2=ND2(I)
 1262 IF(OPT(7).NE.0)GO TO 1265
      KTST1=NTST(I)
      KTST2=ITST(I)
 1265 READ(NTP,END=1280) MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      IF(ND1(I).EQ.0)GO TO 1270
      IF(IDATE.GE.ND1(I).AND.IDATE.LE.ND2(I))GO TO 1270
      GO TO 1265
 1270 CONTINUE
      MCODE(1)=IDINT(MC/100000000.0)*MLT1
      MCODE(2)=IDINT(MC/10000000.0)*MLT1
      MCODE(3)=IDINT(MC/1000000.0)
      MCODE(4)=IDINT(MC/10000.0)-MCODE(3)*100
      MCODE(5)=IDINT(MC-10000.0*DFLOAT(IDINT(MC/10000.0))+0.1)
      MCODED=IDINT(MC/100000000.0)*100
      MCODE(3)=IDINT(MC/1000000.0)*MLT1
      IF(OPT(7).EQ.0)GO TO 1275
      GO TO 1330
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    1275 CONTINUE
         IF(MCODE(4).EQ.0.AND.MCUDED  .EQ.MKSIC)GO TO 1320
         IF(OPT(23).EQ.0)GO TO 1281
         DO 1282 J=1,NPLT
         KTST1=NTST(J)
         KTST2=ITST(J)
         IF(KTST1.EQ.MCODE(KTST2)) GO TO 1330
    1282 CONTINUE
         GO TO 1283
    1281 CONTINUE
         IF(KTST1.EQ.MCODE(KTST2)) GO TO 1330
    1283 CONTINUE
         GO TO 1265
    1280 REWIND NTP
         IF(NOP.EQ.1)GO TO 1310
         NOP=NOP+1
         IF(KTST2.EQ.4)GO TO 1290
         WRITE(6,6030)KTST1
         GO TO 1300
    1290 WRITE(6,6031)KTST1
    1300 CONTINUE
         ND1(I)=0
         NDT1=0
         GO TO 1265
    1310 WRITE(6,6032)
         GO TO 2000
    1320 CONTINUE
         MSOP=1
    1330 CONTINUE
         KCOD=LCODE(1)
         KADD=0
         IF(KCOD.EQ.0)LADD=0
         IF(KCOD.EQ.0)GO TO 1335
         DO 1332 J=1,3
         DCD1(LADD,J)=DEC(J)
         LCD1(LADD,J)=LCODE(J)
         IF(LCODE(J).NE.0)KADD=KADD+1
    1332 CONTINUE
    1335 CONTINUE
         CALL ZC(JADD,LKTST,NDT1,KBT,NTST1,NTST2,ALEQ,NTP,NDT2,KTST1,KTST2,
        1LADD,KCOD,MKSIC,MSOP,NTST3,KADD,NPLT)
         NOP=0
         REWIND NTP
         JBD=JADD
         DO 1336 JT=1,JBD
         IF(JCHK(JT).EQ.0)GO TO 1336
         KADD=JTC(JCHK(JT))
         DO 1337 JU=1,KADD
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      KF=NOM(LCD1(JCHK(JT),JU))
      IF(KF.NE.0)GO TO 1337
      JADD=JADD+1
      KF=JADD
      NOM(LCD1(JCHK(JT),JU))=KF
      ALEQ2(KF)=10.0*ALOG10(DCD1(JCHK(JT),JU))+ALEQ2(JT)
      STDAM(KF)=STDAM(JT)
      JARR(KF)=LCD1(JCHK(JT),JU)
      JCHK(KF)=0
      DO 1338 JV=1,5
      KNAM1(KF,JV)=KDATA(JV)
 1338 CONTINUE
 1337 CONTINUE
 1336 CONTINUE
 1400 KKI=I
      LCC=LC
      NPLTI=I
      IF(OPT(23).EQ.1)NPLTI=NPLT
      JMAX=JADD+LC
      JBL=JMAX
      NBT=0
C   NOW WE CALL ROUTINE TO CALCULATE PERSONNEL AND EQUIPMENT IMPACTS
      JA=0
      CALL WCI(KKI,NPLTI,JMAX,JA,OPTST,IZ,NPLT,NTOT,JBL,NTP,MKSIC,LCC
     1,NTRIC)
      IF(OPTST.EQ.1)GO TO 1590
      IF(OPT(22).NE.0)GO TO 1510
      NTRIC=NTRIC+1
      IF(OPT(28).LE.1)GO TO 1410
      ANTH=ANTH2
      EQLV=EQLV2
      NEN=NEN2
      IF(OPT(28).EQ.2.AND.NTRIC.LT.2)GO TO 1400
      IF(OPT(28).EQ.3.AND.NTRIC.EQ.1)GO TO 1400
      ANTH=ANTH3
      EQLV=EQLV3
      NEN=NEN3
      IF(OPT(28).EQ.3.AND.NTRIC.LT.3)GO TO 1400
 1410 CONTINUE
      DO 1500 IJ=1,10000
      NOM(IJ)=0
 1500 CONTINUE
      JADD=1
      LADD=1
      REWIND 11
      GO TO 2000
 1510 CONTINUE
      OPTST=1
      NTP=12
      IF(OPT(19).NE.0.AND.OPT(15).NE.0)GO TO 1583
      IF(OPT(19).NE.0)GO TO 1580
C   NOW WE WRITE FIRST PASS DATA ON FILE
      IF(OPT(20).NE.0)GO TO 1580
      IF(OPT(21).EQ.2)GO TO 1560
      DO 1550 IJ=1,JA
      WRITE(50) L8I(LSTO(IJ)),L8IWC(LSTO(IJ)),LWP(LSTO(IJ)),LWPWC(LSTO
     1(IJ)),LSTO(IJ)
 1550 CONTINUE
      IF(OPT(21).EQ.1)GO TO1581
 1560 DO 1570 IJ=1,JA
      WRITE(50) L8I(KSTO(IJ)),L8IWC(KSTO(IJ)),LWP(KSTO(IJ)),LWPWC(KSTO
     1(IJ)),KSTO(IJ)
 1570 CONTINUE
 1581 CONTINUE
      IF(OPT(21).EQ.2)GO TO 1582
      DO 1572 IJ=1,JE
      WRITE(50) AL82(MSTO(IJ)),AL82WC(MSTO(IJ)),ALVP(MSTO(IJ)),
     1ALVPWC(MSTO(IJ)),MSTO(IJ)
 1572 CONTINUE
      IF(OPT(21).EQ.1)GO TO 1580
 1582 CONTINUE
      DO 1575 IJ=1,JE
      WRITE(50) AL82(NSTO(IJ)),AL82WC(NSTO(IJ)),ALVP(NSTO(IJ)),
     1ALVPWC(NSTO(IJ)),NSTO(IJ)
 1575 CONTINUE
 1580 CONTINUE
      END FILE 50
      REWIND 50
 1583 CONTINUE
      LADD=1
      JADD=1
      REWIND 11
      DO 1586 IJ=1,10000
      NOM(IJ)=0
 1586 CONTINUE
      IF(OPT(28).EQ.0)GO TO 1585
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 1585
      LNT90=NEXP
      LNW90=NEXPWC
      GO TO 1262
 1585 CONTINUE
      RSUM=SUM
      RSUMWC=SUMWC
      LNT90=NT90
      LNW90=NW90
      LNT75=NT75
      LNW75=NW75
      GO TO 1262
 1590 CONTINUE
      REWIND NTP
      CALL WRITE3(IZ,KKI,NTOT,NPLT,JA,JMAX,LC,NTRIC)
 1800 CONTINUE
      DO 1810 IJ=1,10000
      NOM(IJ)=0
 1810 CONTINUE
      OPTST=0
      LADD=1
      JADD=1
      NTP=11
      REWIND 11
      REWIND 12
      REWIND 50
      NTRIC=NTRIC+1
      IF(OPT(28).LE.1)GO TO 2000
      ANTH=ANTH2
      EQLV=EQLV2
      NEN=NEN2
      IF(OPT(28).EQ.2.AND.NTRIC.LT.2)GO TO 1252
      IF(OPT(28).EQ.3.AND.NTRIC.EQ.1)GO TO 1252
      ANTH=ANTH3
      EQLV=EQLV3
      NEN=NEN3
      IF(OPT(28).EQ.3.AND.NTRIC.LT.3)GO TO 1252
 2000 CONTINUE
 2800 CONTINUE
 5001 FORMAT(30I1)
 5002 FORMAT(I4,1X,I2,1X,I2,1X,I2,1X,I2,1X,I2,1X,I6,1X,7A4)
 5003 FORMAT(I5,1X,5A4)
 5004 FORMAT(I4,1X,15A4)
 5005 FORMAT(I4,1X,I2,1X,I2)
 5006 FORMAT(I3,16X,I4,5(I4,F6.1))
 5007 FORMAT(23X,5(I4,F6.1))
 5008 FORMAT(I6,20X,F5.1,2X,3(I4,1X,F4.1,1X))
 5009 FORMAT(I4,2X,I4,2X,I2)
 5010 FORMAT(3(I4,1X),5X,5A4,5X,10X,I2,2X,I2,2X,I4)
 5011 FORMAT(9A4,    I6)
 5051 FORMAT(21X,10A4)
 5501 FORMAT(3(2F5.1,I5),F5.1,I5)
 5502 FORMAT(2X,I2,10(1X,I4))
 6001 FORMAT(//12X, 7HOPTION ,I1,23H MUST EQUAL ONE OR ZERO/12X,
     128HAT THIS TIME IT IS EQUAL TO ,I5/)
 6002 FORMAT(1H1//////12X,54HLIST OF PLANTS AND/OR SIC CODES REQUESTED F
     1OR THIS RUN//  12X, 8HSIC CODE,2X,9HPLANT NO.,2X,10HSTART DATE,2X,
     210H END DATE ,2X,10HSTART DATE,2X,8HEND DATE,2X,8HTUT. NO.,2X,
      328H     PLANT DESCRIPTION        ,/33X,
      310HFOR EQUIP.,2X,10HFOR EQUIP.,2X,10HFOR PERS. ,2X,8HFOR PERS,2X,
      48HOF PERS.)
 6003 FORMAT(/12X,64HTHE TOTAL NUMBER OF PLANTS AND/OR SIC CODES TO BE C
     1ONSIDERED IS ,  I2)
 6004 FORMAT(1H1//12X,69HTHIS RUN CONSIDERS ALL DATA CONTAINED IN THE DA
     1TA BANK, ALL SIC CODES/12X,27HSTART DATE FOR EQUIPMENT = ,I2/12X,
     225HEND DATE FOR EQUIPMENT = ,I2/12X,30HSTART DATE FOR WORKER CATS.
     3 = ,I2/12X,28HEND DATE FOR WORKER CATS. = ,I2/12X,25HTOTAL NUMBER
     4OF WORKERS = ,I6//)
 6005 FORMAT(14X,I4,8X,I2,9X,I2,10X,I2,10X,I2,9X,I2,6X,I6,3X,7A4)
 6006 FORMAT(12X,53HTHIS RUN AVERAGES OVER ALL CHOSEN SIC CODES OR PLANT
     1S)
 6007 FORMAT(12X,24HTHERE IS NO DATA SO STOP)
 6008 FORMAT(//12X,36HERROR - THERE IS NO LOJ DATA SO STOP)
 6009 FORMAT(//12X,36HERROR - THERE IS NO LOE DATA SO STOP)
 6010 FORMAT(//12X,67HPLEASE DONT SUBMIT MORE THAN300 LINES OF PERSONNEL
     1 DATA AT ONE TIME)
 6013 FORMAT(//12X,65HPLEASE DONT SUBMIT MORE THAN 600 LINES OF EQUIP. D
     1ATA AT ONE TIME)
 6014 FORMAT(//12X,41HTHERE IS NO PERSONNEL HOURLY DATA SO STOP)
 6015 FORMAT(1H1  //////12X,9A4,17X,12HBBN JOB NO. ,I6//)
 6016 FORMAT(41X,12HLIST OF JOBS//12X,3HJOB,9X,15HJOB DESCRIPTION/12X,
     14HCODE/)
 6017 FORMAT(12X,I5,8X,5A4)
 6018 FORMAT(38X,17HLIST OF EQUIPMENT//12X,6HEQUIP.,4X,12HGENERIC NAME,
     1 9X,4HTY E,17X14HSIZE≠CON ITION/13X,4 CODE/)
 6019 FORMAT(13X,I4,5X,5A4,1X,5A4,1X,5A4)
 6020 FORMAT(31X,32HINPUT PERSONNEL WORK ASSIGNMENTS/)
 6021 FORMAT(29X,36HDATA BANK PERSONNEL WORK ASSIGNMENTS/)
 6022 FORMAT(12X,9HSIC CODE:,1X,I4,17X,10HPLANT NO: ,I2,17X,6HDATE: ,
     1I4/)
 6023 FORMAT(12X,4H JOB,3X,20HJOB DESCRIPTION      ,2X, 5HNO OF,4X,
     131HTIME SPENT USING EQUIPMENT CODE/12X,4HCODE,25X,5HPERS.,2X,
     24HCODE,2X,4HTIME,2X,4HCODE,2X,4HTIME,2X,4HCODE,2X,4HTIME/)
 6024 FORMAT(12X,I4,3X,5A4,2X,I5,2X,I4,1X,F5.1,2X,I4,1X,F5.1,2X,I4,1X,
     1F5.1)
 6025 FORMAT(/12X,34HTHERE IS NO EQUIPMENT DATA SO STOP/)
 6026 FORMAT(25X,20HINPUT EQUIPMENT DATA/)
 6027 FORMAT(23X,24HDATA BANK EQUIPMENT DATA/)
 6028 FORMAT(12X,6HEQUIP., 8X,12HGENERIC NAME,10X,5H LEQ /12X,6H CODE ,
     130X,5H DBA /)
 6029 FORMAT(13X,I4,9X,5A4,2X,F5.1)
 6030 FORMAT(//12X,31HNO EQUIPMENT DATA FOR SIC CODE ,I4,1X,
     118HIN SPECIFIED DATES/12X,26HNOW RELAX DATE RESTRICTION)
 6031 FORMAT(//12X,33HNO EQUIPMENT DATA FOR PLANT CODE ,I2,1X,
     118HIN SPECIFIED DATES/12X,26HNOW RELAX DATE RESTRICTION)
 6032 FORMAT(/12X,52HTHERE IS NO EQUIPMENT DATA AT ALL FOR THE ABOVE COD
      1E)
 6033 FORMAT(1H1//)
 6045 FORMAT(//12X,28HOPTION 8 MUST EQUAL 2,3 OR 4/12X,28HAT THIS TIME I
     1T IS EQUAL TO ,I4)
 6046 FORMAT(//12X,31HOPTION 25 MUST EQUAL 0,1,2 OR 3/12X,28HAT THIS TIM
     1E IT IS EQUAL TO ,I4)
 6047 FORMAT(//12X,29HOPTION 21 MUST EQUAL 0,1 OR 2/12X,28HAT THIS TIME
     1IT IS EQUAL TO ,I4)
 6048 FORMAT(//12X,31HOPTION 28 MUST EQUAL 0,1,2 OR 3//)
 6051 FORMAT(46X,3(2X,I4,1X,F5.1))
 6052 FORMAT(1X)
 6061 FORMAT(1H1///12X,13HOPTION NUMBER,6X,12HOPTION VALUE/)
 6062 FORMAT(17X,I2,17X,I2,11X,10A4)
 6071 FORMAT(1H1//////25X,26HINPUT NOISE REDUCTION DATA//
     120X,35HEACH LINE SHOWS THE NOISE REDUCTION/
     215X,45HSPECIFICATIONS FOR A RANGE OF EQUIPMENT CODES///
     318X,8HCODE FOR,12X,8HCODE FOR,9X,5HNOISE/
     413X,18HBEGINNING OF RANGE,5X,12HEND OF RANGE,5X,9HREDUCTION/)
 6072 FORMAT(20X,I4,16X,I4,13X,I2)
 6115 FORMAT(1H1//////12X,9A4)
 6501 FORMAT(     22X,17HANALYSIS CRITERIA//12X,18HTHRESHOLD LEVEL = ,
     1F5.1,4H DBA/12X,38H8-HOUR EQUIVALENT PERMISSIBLE LEVEL = ,F5.1,
     24H DBA/12X,50HEXCHANGE RATE (DB PER HALVING OF EXPOSURE TIME) = ,
     3I1   ,4H DBA)
 6502 FORMAT(1H1//////12X,59HLIST OF EQUIPMENT CODES WHICH ARE TO BE CON
     1SIDERED TOGETHER/12X,42HIN THE NOISE REDUCTION ITERATION PROCEDURE
     2/)
 6504 FORMAT(//12X,43HOPTION 22 AND OPTION 27 CANNOT BOTH EQUAL 1)
 6505 FORMAT(28X,5HFIRST)
 6506 FORMAT(28X,6HSECOND)
 6507 FORMAT(28X,5HTHIRD)
 6513 FORMAT(////)
 6514 FORMAT(1H1////)
 6576 FORMAT(1H1//////20X,35HLIST OF GENERALIZED EQUIPMENT CODES//
     1                       13X,4HCODE,7X,5HBEGIN,5X,4H END,5X,19HGENERAL D
     2ESCRIPTION/)
 6577 FORMAT(13X,I4,7X,I4,6X,I4,5X,5A4)
 6626 FORMAT(36X,21HINPUT BACKGROUND DATA/)
 6627 FORMAT(34X,24HDATA BANK EQUIPMENT DATA/)
 6628 FORMAT(12X,5HBACK.,1X,12HGENERAL NAME,8X,5H LEQ , 2X,36HEQUIPMENT
     1CONTRIBUTION TO BACKGROUND/12X,5HCODE ,21X,5H DBA ,2X,4HCODE,1X,
     26HCONTR.,2X,4HCODE,1X,6HCONTR.,2X,4HCODE,1X,6HCONTR./)
 6629 FORMAT(12X,I4,2X,5A4,F5.1,2X,3(I4,2X,F4.2,3X))
      STOP
      END
      SUBROUTINE ZC (JADD,LKTST,NDT1,KBT,NTST1,NTST2,ALEQ,NTP,NDT2,
     1KTST1,KTST2,LADD,KCOD,MKSIC,MSUP,NTST3,KADD,NPLT)
      IMPLICIT INTEGER (O)
      REAL*8 MC
      DIMENSION         MNAME2(5)
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
     1JTC(150),JTC2(150),AINC,DY,ANTH,EQLV,NEN,NACC
      COMMON/EMC/MCODE(5),MNAME(5),IDATE
      COMMON/NCOM/NOM(10000)
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/ITSDE/ ITST(50),OPT(30),NTST(50)
C
C    THIS SUBROUTINE CALCULATES AVERAGE LEQS FOR EQUIPMENT DATA
C
      SUM=ALEQ
      I=1
      STD=ALEQ**2
      LKTST=0
      MCO=MCODE(5)
      DO 5 J=1,5
      MNAME2(J)=MNAME(J)
    5 CONTINUE
   10 READ(NTP,END=60 )MC,(MNAME(J),J=1,5),ALEQ,      (LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      MCODED=IDINT(MC/100000000.0)*100
      MCODE(1)=IDINT(MC/100000000.0)*MLT1
      MCODE(2)=IDINT(MC/10000000.0)*MLT1
      MCODE(3)=IDINT(MC/1000000.0)
      MCODE(4)=IDINT(MC/10000.0)-MCODE(3)*100
      MCODE(5)=IDINT(MC-10000.0*DFLOAT(IDINT(MC/10000.0))+0.1)
      MCODE(3)=IDINT(MC/1000000.0)*MLT1
      IF(OPT(7).EQ.1.AND.NTST1.EQ.0.AND.MCO.EQ.MCODE(5))GO TO 40
      IF(OPT(23).EQ.0)GO TO 11
      DO 12 J=1,NPLT
      KTST1=NTST(J)
      KTST2=ITST(J)
      IF(MCO.EQ.MCODE(5).AND.KTST1.EQ.MCODE(KTST2))GO TO 40
   12 CONTINUE
      GO TO 13
   11 CONTINUE
      IF(MCO.EQ.MCODE(5).AND.KTST1.EQ.MCODE(KTST2))GO TO 40
   13 CONTINUE
      IF(MCODE(5).GE.NTST1.AND.MCODE(5).LE.NTST2)GO TO 40
      IF(MCODE(5).EQ.NTST3)GO TO 40
      IF(MCODE(4).EQ.0.AND.MCODED  .EQ.MKSIC.AND.MCO.EQ.MCODE(5))GO TO40
      IF(MCO.EQ.MCODE(5))GO TO 10
   17 ALEQ2(JADD)=SUM/FLOAT(I)
```

```
      JARR(JADD)=MCO
      JSEQ(JADD)=I
      NOM(MCO)=JADD
      IF(KCOD.EQ.0) GO TO 19
      DO 181 IJ=1,KADD
      DCD1(LADD,IJ)=DCD1(LADD,IJ)/FLOAT(I)
  181 CONTINUE
      JCHK(JADD)=LADD
      JTC(LADD)=KADD
      JTC2(LADD)=JADD
      GO TO 19
   18 CONTINUE
      I=1
      JADD=JADD+1
      IF(JADD.LE.500) GO TO 182
      WRITE(6,6601)
  182 CONTINUE
      MCO=MCODE(5)
      KCOD=LCODE(1)
      SUM=ALEQ
      STD=ALEQ**2
      IF(MCODE(4).EQ.0)MSOP=I
      DO 38 J=1,5
      MNAME2(J)=MNAME(J)
   38 CONTINUE
      IF(LCODE(1).EQ.0) GO TO 10
      LADD=LADD+1
      KADD=0
      DO 190 J=1,3
      IF(LCODE(J).EQ.0)GO TO 192
      KADD=KADD+1
      LCD1(LADD,KADD)=LCODE(J)
      DCD1(LADD,KADD)=DEC(J)
  190 CONTINUE
  192 CONTINUE
      IF(LADD.LE.100) GO TO 183
      WRITE(6,6602)
      STOP
  183 CONTINUE
      GO TO 10
   19 CONTINUE
      IF(I.EQ.1)GO TO 20
      DIFF=STD*FLOAT(I)-SUM*SUM
      IF(DIFF.LE.0.00001)GO TO 20
      STDAM(JADD)=SQRT((STD*FLOAT(I)-SUM*SUM)/FLOAT(I*(I-1)))
      GO TO 30
   20 STDAM(JADD)=0.0
   30 CONTINUE
```

```
      DO 35 J=1,5
      KNAM1(JADD,J)=MNAME2(J)
   35 CONTINUE
      IF(LKTST.EQ.1.OR.KBT.EQ.1)GO TO 70
   24 IF(NDT1.EQ.0)GO TO 21
      IF(IDATE.GE.NDT1.AND.IDATE.LE.NDT2)GO TO 21
      GO TO 23
   21 IF(OPT(7).EQ.1)GO TO 18
   22 CONTINUE
      IF(OPT(23).EQ.0)GO TO 41
      DO 42 J=1,NPLT
      KTST1=NTST(J)
      KTST2=ITST(J)
      IF(KTST1.EQ.MCODE(KTST2))GO TO 18
   42 CONTINUE
      GO TO 43
   41 CONTINUE
      IF(KTST1.EQ.MCODE(KTST2))GO TO 18
   43 CONTINUE
      IF(MCODE(4).EQ.0.AND.MCODED  .EQ.MKSIC)GO TO 18
   23 CONTINUE
      READ(NTP,END=70 )MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),
     1J=1,3),IDATE
     1,MLT1
      MCODED=IDINT(MC/100000000.0)*100
      MCODE(1)=IDINT(MC/100000000.0)*MLT1
      MCODE(2)=IDINT(MC/10000000.0)*MLT1
      MCODE(3)=IDINT(MC/1000000.0)
      MCODE(4)=IDINT(MC/10000.0)-MCODE(3)*100
      MCODE(5)=IDINT(MC-10000.0*DFLOAT(IDINT(MC/10000.0))+0.1)
      MCODE(3)=IDINT(MC/1000000.0)*MLT1
      GO TO 24
   40 IF(NDT1.EQ.0)GO TO 50
      IF(IDATE.GE.NDT1.AND.IDATE.LE.NDT2)GO TO 50
      GO TO 10
   50 CONTINUE
      IF(MCODE(4).NE.0.AND.MSUP.EQ.0)GO TO 80
      IF(MCODE(4).EQ.0.AND.MSUP.EQ.1)GO TO 80
      IF(MCODE(4).EQ.0)GO TO 10
      SUM=ALEQ
      STD=ALEQ**2
      I=1
      MSUP=0
      GO TO 10
   80 SUM=SUM+ALEQ
      STD=STD+ALEQ**2
      I=I+1
      IF(LCODE(1).EQ.0) GO TO 10
      MBD=1
      KBD=MAX0(KADD,MBD)
      DO 85 J=1,3
      IF(LCODE(J).EQ.0)GOTO 10
      DO 87 JK=1,KBD
      IF(LCODE(J).EQ.LCD1(LADD,JK)) GO TO 88
   87 CONTINUE
      KADD=KADD+1
      IF(KADD.LE.20) GO TO 184
      WRITE(6,6603) MCODE(5)
      STOP
  184 CONTINUE
      LCD1(LADD,KADD)=LCODE(J)
      DCD1(LADD,KADD)=DEC(J)
      GO TO 85
   88 DCD1(LADD,JK)=DCD1(LADD,JK)+DEC(J)
   85 CONTINUE
      GO TO 10
   60 LKTST=1
      GO TO 17
   70 CONTINUE
      REWIND NTP
 6601 FORMAT(///12X,37HTOO MANY DIFFERENT ITEMS OF EQUIPMENT/12X,
     139HCHANGE ARRAY SIZE AND SOME PROGRAM CODE/)
 6603 FORMAT(///12X,42HNUMBER OF CONTRIBUTORS TO BACKGROUND CODE ,I4,
     11X,10HEXCEEDS 15/12X,32HCHANGE SOME CODE AND ARRAY SIZES/)
 6602 FORMAT(///12X,30HTOO MANY DIFFERENT BACKGROUNDS/12X,
     132HCHANGE SOME CODE AND ARRAY SIZES/)
      RETURN
      END
      SUBROUTINE WCI(I,NPLTI,JMAX,JA,OPTST,IR,NPLT,NTOT,JBL,NTP,MKSIC,LC
     1A,NTRIC)
      IMPLICIT INTEGER (O)
      REAL L8I,L8IWC,LWP,LWPWC,LWPJ,LWPWCJ,LWPN,LWPWCN,LIJ,LIJWC,KCC*8
     1,JCODE2*8
      COMMON/COSHA/ SWH(10),SLEVWC(10),              JDES(5),M(10),H(10),
     1HS(10),NEXPWC,    JCODE(5),LWPJ(500),LWPN(500),NEXP,LADD
     7,KDATA(5)
      COMMON/LMIX/LMAX(150),LCOD1(150,10)
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
     1JTC(150),JTC2(150),AINC,DY,ANTH,EQLV,NEN,NACC
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/EQ2/ALEQ3(500),STDM3(500),KNAME2(500,5),JARR3(500),JSEQ3(50
     10)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
      COMMON/OD/MAC1(500),MAC2(50),MAC3(50),JCODE2(50),NSC(50)
      COMMON/NCOM/NOM(10000)
      COMMON/NWC/LWP(500),LWPWC(500),NT90,NW90,NT75,NW75,NTTO,LSTO(500),
     1KSTO(500),L8I(500),L8IWC(500),SUM,SUMWC,LNT90,LNT75,LNW90,LNW75,
     2AL82(500),AL82WC(500),ALVP(500),ALVPWC(500),NUMP(500),JOBC(500),
     3NSTO(500),MSTO(500),NJ(500),JE,ORD(500),JBDES2(50,5),RSUM,RSUMWC
      COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
      COMMON/EMC/MCODE(5),MNAME(5),IDATE
      COMMON/ISICP/ICS(20),IPS(20,50),IND(20)
      COMMON/ISORD/ ORD2(600),NPEOP(600),MOLT1(600)
C
C   WRITE RELEVANT DATA FOR WORKER CATEGORIES FROM FILE 21 TO FILE 40
C
      OTST=0
      I8=0
      IF(OPTST.EQ.1)GO TO 85
      IF(NTRIC.NE.0)GO TO 85
      IF(OPT(7).EQ.0)GO TO 30
   10 READ(21,END=20) JC,(JDES(J),J=1,5),JNP,(M(JJ),H(JJ),JJ=1,10),
     1JDATE
     1,MLT1
      I8=I8+1
      NPEOP(I8)=JC
      IF(OPT(26).EQ.0)GO TO 27
      DO 25 IC=1,LCA
      DO 26 IL=1,10
      IF(M(IL).GE.MAC2(IC).AND.M(IL).LE.MAC3(IC))M(IL)=MAC1(IC)
   26 CONTINUE
   25 CONTINUE
   27 CONTINUE
      WRITE(40) JC,(JDES(J),J=1,5),JNP,(M(JJ),H(JJ),JJ=1,10),JDATE
     1,MLT1
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         GO TO 10
      20 END FILE 40
         REWIND 40
         REWIND 21
         GO TO 80
      30 READ(21,END=20) JC,(JDES(J),J=1,5),JNP,(M(JJ),W(JJ),JJ=1,10),
        1JDATE
        1,MLT1
         IF(OPT(26).EQ.0)GO TO 37
         DO 35 IC=1,LCA
         DO 36 IL=1,10
         IF(M(IL).GE.MAC2(IC).AND.M(IL).LE.MAC3(IC))M(IL)=MAC1(IC)
      36 CONTINUE
      35 CONTINUE
      37 CONTINUE
         JCODE(1)=JC/10000000*MLT1
         JCODE(2)=JC/1000000*MLT1
         JCODE(3)=JC/100000
         JCODE(4)=JC/1000-JCODE(3)*100
         JCODE(5)=JC-1000*(JC/1000)
         JCODE(3)=JC/100000*MLT1
         DO 70 JI=I,NPLTI
         IF(NTST(JI).NE.JCODE(ITST(JI))) GO TO 70
         IF(ND3(JI).EQ.0)GO TO 40
         IF(JDATE.LT.ND3(JI).OR.JDATE.GT.ND4(JI))GO TO 70
         GO TO 40
      70 CONTINUE
         GO TO 30
      40 CONTINUE
         IB=IB+1
         NPEUP(IB)=JC
         MOLT1(IB)=MLT1
         WRITE(40) JC,(JDES(J),J=1,5),JNP,(M(JJ),W(JJ),JJ=1,10),JDATE
        1,MLT1
         GO TO 30
      80 CONTINUE
         CALL JOBST1(ORD2,IB,NPEUP)
         CALL NPSC(IR,NTOT,IB)
         CALL SORTWC(NPLT,NTOT,I,IR,OPTST)
      85 CONTINUE
         IF(NTRIC.NE.0.AND.OPT(22).EQ.0)GO TO 1500
C
C     NOW WRITE OUT EQUIPMENT AVERAGED DATA
C
         LX=0
         JMZ=JBL-LCA
         CALL JOBST2(ORD2,JMZ,ALEQ2)
         LCD=0
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          LD=JMAX-LCA+1
          IF(OPT(24).EQ.0)GO TO 1400
          DO 760 IW=LD,JMAX
          JSEQ(IW)=0
          JARR(IW)=0
          STDAM(IW)=0.0
          ALEQ2(IW)=0.0
      760 CONTINUE
          DO 710 IZ=1,LCA
          J6=0
          MSK=NSIC(I)/JCODE2(IZ)
          IF(NSC(IZ).EQ.MSK)GO TO 702
          JMAX=JMAX-1
          LCD=LCD+1
          GO TO 710
      702 CONTINUE
          MAC1(IZ-LCD)=MAC1(IZ)
          MAC2(IZ-LCD)=MAC2(IZ)
          MAC3(IZ-LCD)=MAC3(IZ)
          JIZ=JMZ+IZ
          DO 705 LZ=1,JMZ
          IF(JCHK(LZ).NE.0)GO TO 705
          IF(JARR(LZ).LE.MAC3(IZ).AND.JARR(LZ).GE.MAC2(IZ))GO TO 700
          IF(JARR(LZ).EQ.MAC1(IZ))GO TO 700
          GO TO 705
      700 CONTINUE
          JSEQ(JIZ)=JSEQ(JIZ)+JSEQ(LZ)
          ALEQ2(JIZ)=ALEQ2(JIZ)+ALEQ2(LZ)*JSEQ(LZ)
          STDAM(JIZ)=STDAM(JIZ)+STDAM(LZ)**2*(JSEQ(LZ)-1)
          J6=J6+1
      705 CONTINUE
          DO 706 J=1,5
          KNAM1(JIZ,J)=JBDES2( IZ,J)
      706 CONTINUE
          JARR(JIZ)=MAC1(IZ)
          IF(JSEQ(JIZ).EQ.0)GO TO 710
          ALEQ2(JIZ)=ALEQ2(JIZ)/JSEQ(JIZ)
          IF(NOM(MAC1(IZ)).NE.0)ALEQ2(NOM(MAC1(IZ)))=0.0
          NOM(MAC1(IZ))=JIZ
          IF(J6.EQ.JSEQ(JIZ).OR.STDAM(JIZ).EQ.0)GO TO 710
          STDAM(JIZ)=SQRT(STDAM(JIZ)/(JSEQ(JIZ)-J6))
      710 CONTINUE
          LCA=LCA-LCD
          JMAX=JMAX-LCD
          JBL=JBL-LCD
          JMZ=JBL-LCA
     1400 NBT=0
          IF(OPT(15).EQ.1)GO TO 1490
     1410 CONTINUE
```

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      NLN=40
      IF(OTST.EQ.1)GO TO 1415
      WRITE(6,6102) (NAME(J),J=1,9),JBNJNO
      GO TO 1417
 1415 CONTINUE
      WRITE(6,6202) (NAME(J),J=1,9),JBNJNO
 1417 CONTINUE
      IF(OPTST.EQ.0)GO TO 1420
      NLN=NLN-2
      WRITE(6,6120)
 1420 CALL WRITE1(IR,  1,NO1,NO2,NTOT,NPLT,NLN)
      WRITE(6,6103)
C    NOW WRITE OUT LIST
      NZT=0
      DO 1450 IL=1,45
      NZT=NZT+1
      NBT=NBT+1
      IF(NBT.GT.JMZ)GO TO 1490
      ORD2(NBT)=ORD2(NBT)+LX
      IF(ALEQ2(ORD2(NBT)).EQ.0.0.OR.JARR(ORD2(NBT)).EQ.1000)GO TO 1426
      WRITE(6,6104) JARR(ORD2(NBT)),(KNAM1(ORD2(NBT),J),J=1,5),JSEQ(ORD2
     1(NBT)),ALEQ2(ORD2(NBT)),STDAM(ORD2(NBT))
      GO TO 1427
 1426 CONTINUE
      NZT=NZT-1
 1427 CONTINUE
      IF(OPTST.EQ.1.OR.OPT(22).EQ.0.OR.OPT(17).EQ.1)GO TO 1425
       WRITE(50) ALEQ2(ORD2(NBT)),STDAM(ORD2(NBT)),ORD2(NBT)
 1425 CONTINUE
      IF(NZT.GE.NLN)GO TO 1410
 1450 CONTINUE
 1490 CONTINUE
      IF(OPT(24).EQ.0)GO TO 1500
      IF(OTST.EQ.1)GO TO 1500
      OTST=1
      DO 1510 IW=1,LCA
      ALEQ3(IW)=ALEQ2(IW+JMZ)
      STDM3(IW)=STDAM(IW+JMZ)
      IF(ALEQ3(IW).EQ.0.)ALEQ3(IW)=FLOAT(IW)/1.E+9
 1510 CONTINUE
      LX=JMZ+LCD
      JMZ=LCA
      CALL JOBST2(ORD2,LCA,ALEQ3)
      IF(OPT(15).EQ.1)GO TO 1500
      GO TO 1400
 1500 CONTINUE
      IF(OPT(25).EQ.0.OR.OPT(25).EQ.1)GO TO 90
      WRITE(6,6001) OPT(25)
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            STOP 6
         90 CONTINUE
            IF(OPT(28).EQ.0)GO TO 88
            IF(OPT(28).EQ.2.AND.NTRIC.EQ.0)GO TO 88
            IF(OPT(28).EQ.3.AND.NTRIC.EQ.0)GO TO 88
            CALL OSHA(LCA,NTP,JBL,NPLT,I,NPLTI,MKSIC,JMAX,JA,OPTST,IR,NTOT)
            RETURN
         88 CONTINUE
            JA=0
            SUM=0.0
            SUMWC=0.0
            NT75=0
            NT90=0
            NPOP=NPPP(I)
            NTTO=0
            NW75=0
            NW90=0
            JMZ=JMAX-LCA
        100 READ(31,END=240) KCC,(JOBS(J),J=1,5),(M(JJ),H(JJ),HS(JJ),JJ=1,10)
           1,NPRS
            IF(NPRS.EQ.0)GO TO 100
            CTOT=0.0
            IF(M(1).EQ.0)GO TO 100
            IK=1
            SLEV=0.0
            DO 130 IJ=1,10
            IF(M(IJ).EQ.0)GO TO 135
            SWH(IJ)=H(IJ)
            KJ=NOM(M(IJ))
            IF(KJ.NE.0)GO TO 110
            SLEVWC(IJ)=0.0
            GO TO 130
        110 CONTINUE
            SLEVWC(IJ)=ALEQ2(KJ)
            IF(ALEQ2(KJ).LE.SLEV)GO TO 130
            SLEV=ALEQ2(KJ)
            IK=IJ
        130 CONTINUE
      C     NOW RENORMALISE HOURS
        135 CONTINUE
            DO 160 IJ=1,10
            IF(M(IJ).EQ.0)GO TO 165
            KJ=NOM(M(IJ))
            IF(IJ.EQ.IK)GO TO 140
            GO TO 150
        140 CONTINUE
            SLEVWC(IJ)=ALEQ2(KJ)+STDAM(KJ)
             SWH(IJ)=H(IJ)+HS(IJ)
```

```
   150 CTOT=CTOT+SWH(IJ)
   160 CONTINUE
   165 CONTINUE
       DO 170 IJ=1,10
       IF(M(IJ).EQ.0)GO TO 175
       SWH(IJ)=SWH(IJ)/CTOT
   170 CONTINUE
   175 CONTINUE
       JA=JA+1
       L8I(JA)=1.E-6
       L8IWC(JA)=0.0
       DO 230 IJ=1,10
       IF(M(IJ).EQ.0)GO TO 231
       KJ=NOM(M(IJ))
       IF(KJ.EQ.0)GO TO 230
       IF(KNAM1(KJ,3).EQ.KDATA(3))GO TO 230
       IF(M(IJ).EQ.1000)GO TO 230
   215 CONTINUE
       LIJWC=              SWH(IJ)*10.0**(SLEVWC(IJ)/10.0)*OPT(8)/4.0
       LIJ=             H(IJ)*10.0**(ALEQ2(KJ)/10.0)*OPT(8)/4.0
       L8I(JA)=L8I(JA)+LIJ
       L8IWC(JA)=L8IWC(JA)+LIJWC
   230 CONTINUE
   231 CONTINUE
       IF(L8I(JA).LT.0.0001)GO TO 233
       L8IWC(JA)=10.0*ALOG10(L8IWC(JA))
       L8I(JA)=10.0*ALOG10(L8I(JA))
       IF(L8I(JA).GE.75.0)GO TO 232
   233 CONTINUE
       LWP(JA)=L8I(JA)/1000000.0
       GO TO 234
   232 WH=0.025*(L8I(JA)-75.0)**2
       LWP(JA)=NPRS*WH
       SUM=SUM+LWP(JA)
       NT75=NT75+NPRS
   234 IF(L8IWC(JA).GE.75.0)GO TO 236
       LWPWC(JA)=L8IWC(JA)/1000000.0
       GO TO 237
   236 WHWC=0.025*(L8IWC(JA)-75.0)**2
       LWPWC(JA)=NPRS*WHWC
       SUMWC=SUMWC+LWPWC(JA)
       NW75=NW75+NPRS
   237 DO 238 J=1,5
       KNAME2(JA,J)=JDES(J)
   238 CONTINUE
       JSEQ3(JA)=NPRS
       NTTO=NTTO+NPRS
       JARR3(JA)=IDINT(KCC-100000.0*DFLOAT(IDINT(KCC/100000.0))+0.1)
```

```
      IF(L8I(JA).GT.90.0)NT90=NT90+NPRS
      IF(L8IWC(JA).GT.90.0)NW90=NW90+NPRS
      GO TO 100
  240 CONTINUE
      IF(OPT(25).NE.1)GO TO 248
      DO 245 IJ=1,JA
      LWP(IJ)=LWP(IJ)*NPOP/NTTO
      LWPWC(IJ)=LWPWC(IJ)*NPOP/NTTO
      JSEQ3(IJ)=JSEQ3(IJ)*(FLOAT(NPOP)/FLOAT(NTTO)+1.E-8)
  245 CONTINUE
  248 CONTINUE
      NTTT=NTTO
      IF(OPT(25).NE.1)GO TO 250
      SUM=SUM*NPOP/FLOAT(NTTO)
      SUMWC=SUMWC*NPOP/FLOAT(NTTO)
      NT90=NT90*NPOP/NTTO
      NW90=NW90*NPOP/NTTO
      NT75=NT75*NPOP/NTTO
      NW75=NW75*NPOP/NTTO
      NTTO=NPOP
  250 CONTINUE
      REWIND 31
C
C    CALL ROUTINE TO RANK ORDER LWP ARRAY IN DESCENDING ORDER IF IT IS
C    REQUIRED TO WRITE OUT WORKER CATEGORY DATA
      IF(OPTST.EQ.1)GO TO 255
      CALL JOBST2(LSTO,JA,LWP)
      CALL JOBST2(KSTO,JA,L8I)
C    NOW WRITE OUT PERSONNEL NOISE EXPOSURE AND IMPACT DATA
C
  255 IF(OPT(19).NE.0)GO TO 300
      NB =0
  260 CONTINUE
      NLN=40
      WRITE(6,6110) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6210)
      IF(OPTST.EQ.0)GO TO 265
      NLN=NLN-2
      WRITE(6,6120)
  265 CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      WRITE(6,6108)
C     NOW WRITE OUT LIST
      NZT=0
      DO 270 IL=1,45
      NZT=NZT+1
      NB =NB +1
      IF(NB .GT.JA)GO TO 280
      LC=INT(LWP(LSTO(NB)))
      LW=INT(LWPWC(LSTO(NB)))
      IF(L8I(LSTO(NB)).LT.75.0.AND.L8IWC(LSTO(NB)).LT.75.0)GO TO 266
      IF(L8I(LSTO(NB)).LT.75.0)GO TO 267
      WRITE(6,6109) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),L8I(LSTO(NB)),L8IWC(LSTO(NB)),LC,LW
      GO TO 269
  266 WRITE(6,6301) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),LC,LW
      GO TO 269
  267 WRITE(6,6302) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),L8IWC(LSTO(NB)),LC,LW
  269 CONTINUE
      IF(NZT.GE.NLN)GO TO 260
  270 CONTINUE
  280 CONTINUE
      DO 590 JZ=1,JA
      JOBC(JZ)=JARR3(JZ)/100
      NUMP(JZ)=0
      AL82(JZ)=0.
      ALVP(JZ)=0.
      AL82WC(JZ)=0.
      ALVPWC(JZ)=0.
  590 CONTINUE
      JB=0
      DO 595 JZ=1,JA
      IF(L8I(JZ).LE.65.0)L8I(JZ)=65.0
      IF(L8IWC(JZ).LE.65.0)L8IWC(JZ)=65.0
  595 CONTINUE
      DO 600 JZ=1,JA
      IF(JOBC(JZ).EQ.0)GO TO 600
      NAV=0
      JB=JB+1
      JOBC(JB)=JOBC(JZ)
      NJ(JB)=JZ
      DO 640 IZ=JZ,JA
      IF(JOBC(IZ).NE.JOBC(JB))GO TO 640
      IF(JB.EQ.IZ)GO TO 610
      JOBC(IZ)=0
  610 CONTINUE
      NUMP(JB)=NUMP(JB)+JSEQ3(IZ)
      AL82(JB)=AL82(JB)+L8I(IZ)*JSEQ3(IZ)
      AL82WC(JB)=AL82WC(JB)+L8IWC(IZ)*JSEQ3(IZ)
      NAV=NAV+JSEQ3(IZ)
      ALVP(JB)=ALVP(JB)+LWP(IZ)
      ALVPWC(JB)=ALVPWC(JB)+LWPWC(IZ)
  640 CONTINUE
      IF(NAV.EQ.0)GO TO 615
      AL82(JB)=AL82(JB)/NAV
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      AL82WC(JB)=AL82WC(JB)/NAV
      GO TO 600
  615 CONTINUE
      AL82(JB)=0.
      AL82WC(JB)=0.
  600 CONTINUE
      CALL JOBST2(MSTO,JB,ALVP)
      CALL JOBST2(MSTO,JB,AL82)
      NB=0
  660 CONTINUE
      NLN=40
      WRITE(6,6112) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6210)
      IF(OPTST.EQ.0)GO TO 665
      NLN=NLN-2
      WRITE(6,6120)
  665 CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      WRITE(6,6108)
C     NOW WRITE OUT LIST
      NZT=0
      DO 670 IL=1,45
      NZT=NZT+1
      NB =NB +1
      IF(NB .GT.JB)GO TO 680
      LC=INT(ALVP(MSTO(NB)))
      LW=INT(ALVPWC(MSTO(NB)))
      IF(AL82(MSTO(NB)).LT.75.0.AND.AL82WC(MSTO(NB)).LT.75.0)GO TO 666
      IF(AL82(MSTO(NB)).LT.75.0)GO TO 667
      WRITE(6,6109) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
     1NUMP(MSTO(NB)),AL82(MSTO(NB)),AL82WC(MSTO(NB)),LC,LW
      GO TO 669
  666 WRITE(6,6301) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
     1NUMP(MSTO(NB)),LC,LW
      GO TO 669
  667 WRITE(6,6302) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
     1NUMP(MSTO(NB)),AL82WC(MSTO(NB)),LC,LW
  669 CONTINUE
      IF(NZT.GE.NLN)GO TO 660
  670 CONTINUE
  680 CONTINUE
  300 CONTINUE
      JE=JB
C   WRITE OUT TOTAL WORKER EXPOSURE
      IF(OPT(19).EQ.1)GO TO 678
      IF(NZT.LE.23)GO TO 679
  678 CONTINUE
      WRITE(6,6112)(NAME(J),J=1,9),JBNJNO
      WRITE(6,6210)
      IF(OPTST.EQ.1)WRITE(6,6120)
      CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
  679 CONTINUE
      WRITE(6,6130)
  302 WRITE(6,6131) NTT0,NT75,NW75,NT90,NW90,SUM,SUMWC
C   INITIALISE ARRAYS
C
      DO 810 KKK=1,2
      DO 305 KJ=1,JMAX
      LWPJ(KJ)=0.0
      LWPN(KJ)=0.
      NPEOP(KJ)=0
  305 CONTINUE
      IF(OPT(16).NE.0.AND.OPT(17).NE.0)GO TO 400
      BUM=0.0
      JB=0
      LKDT=0
  310 READ(31,END=360) KCC,(JDES(J),J=1,5),(M(JJ),H(JJ),HS(JJ),JJ=1,10),
     1NPRS
      IF(NPRS.EQ.0)GO TO 310
      IF(M(1).EQ.0)GO TO 310
      IF(OPT(25).EQ.1)NPRS=NPRS*NPOP/NTTT
      JB=JB+1
      DO 350 IJ=1,10
      IF(M(IJ).EQ.0)GO TO 310
      IF(M(IJ).EQ.1000)GO TO 350
      KJ=NOM(M(IJ))
      IF(KNAM1(KJ,3).NE.KDATA(3).AND.KJ.NE.0)GO TO 320
      WRITE(6,6002) M(IJ)
      GO TO 350
  320 CONTINUE
      ALJ=            H(IJ)*10.0**(ALEQ2(KJ)/10.0)*OPT(8)/4.0
      IF(L81(JB).LE.75.0)GO TO 336
      NPEOP(KJ)=NPEOP(KJ)+NPRS
      WPJ=   NPRS*ALJ/10.0**(L81(JB)/10.0)
      IF(KKK.EQ.2)WPJ=(WPJ/NPRS)*LWP(JB)
      IF(JCHK(KJ).EQ.0)GO TO 325
      KADD=JTC(JCHK(KJ))
      DO 326 J=1,KADD
      IF(LCD1(JCHK(KJ),J) .EQ.1000)GO TO 326
      KF=NOM(LCD1(JCHK(KJ),J))
      WPX=WPJ*DCD1(JCHK(KJ),J)
      BUM=BUM+WPX
      LWPJ(KF)=LWPJ(KF)+WPX
      NPEOP(KF)=NPEOP(KF)+NPRS
  326 CONTINUE
      GO TO 336
  325 CONTINUE
```

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          LWPJ(KJ)=LWPJ(KJ)+WPJ
      327 CONTINUE
          BUM=BUM+WPJ
      336 CONTINUE
      350 CONTINUE
          GO TO 310
      360 CONTINUE
          DO 370 IJ=1,JMAX
          IF(LWPJ(IJ).GT.0.001)GO TO 365
          LWPJ(IJ)=ALEQ2(IJ)/10000000.0
      365 CONTINUE
          IF(JCHK(IJ).EQ.0)GO TO 366
          LWPJ(IJ)=0.0
          LKDT=LKDT+1
      366 CONTINUE
          IF(BUM.LE.0.0)GO TO 370
          LWPN(IJ)=LWPJ(IJ)/BUM
      370 CONTINUE
          REWIND 31
C
C    NOW WRITE OUT EQUIPMENT IMPACT DATA
C
C
C    PUT ARRAY LWPN IN DESCENDING ORDER THEN WRITE OUT IMPACT DATA
          LX=0
          OTST=0
          JMZ=JMAX-LCA
          JMOZ=JMZ-LKDT
          CALL JOBST2(ORD2,JMZ,LWPJ)
      380 CONTINUE
          IF(OPT(16).NE.0)GO TO 400
          NB =0
      382 CONTINUE
          NLN=30
          IF(OTST.EQ.1)GO TO 383
          WRITE(6,6105) (NAME(J),J=1,9),JBNJNO,KKK
          WRITE(6,6210)
          GO TO 384
      383 CONTINUE
          WRITE(6,6111) (NAME(J),J=1,9),JBNJNO,KKK
          WRITE(6,6210)
      384 CONTINUE
          IF(OPTST.EQ.0)GO TO 385
          NLN=NLN-2
          WRITE(6,6120)
      385 CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
          WRITE(6,6106)
C    NOW WRITE OUT LIST
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      NZT=0
      DO 390 IL=1,45
      NB =NB +1
      NZT=NZT+1
      ORD2(NB)=ORD2(NB)+LX
      IF(NB .GT.JMDZ)GO TO 395
      IF(NPEOP(ORD2(NB)).EQ.0)GO TO 395
      CHLJ=ALEQ2(ORD2(NB))+STUAM(ORD2(NB))
      AC=    LWPJ(ORD2(NB))
      WRITE(6,6107) JARR(ORD2(NB)),(KNAM1(ORD2(NB),J),J=1,5),JSEQ(ORD2(N
     1B)),ALEQ2(ORD2(NB)),CHLJ,NPEOP(ORD2(NB)),AC,   LWPN(ORD2(NB))
      IF(NZT.GE.NLN)GO TO 382
  390 CONTINUE
  395 CONTINUE
      IF(OPT(24).EQ.0)GO TO 400
      IF(OTST.EQ.1)GO TO 400
      OTST=1
C     CALCULATE NUMBER OF PEOPLE TO WRITE IN DATA AVERAGES
      LD=JMAX-LCA+1
      DO 510 IZ=1,LCA
      DO 505 LZ=1,JMZ
      IF(JCHK(LZ).NE.0)GO TO 505
      IF(JARR(LZ).LE.MAC3(IZ).AND.JARR(LZ).GE.MAC2(IZ))GO TO 500
      IF(JARR(LZ).EQ.MAC1(IZ))GO TO 500
      GO TO 505
  500 CONTINUE
      LWPJ(IZ+JMZ)=LWPJ(IZ+JMZ)+LWPJ(LZ)
      LWPN(IZ+JMZ)=LWPN(IZ+JMZ)+LWPN(LZ)
      NPEOP(IZ+JMZ)=NPEOP(IZ+JMZ)+NPEOP(LZ)
  505 CONTINUE
  510 CONTINUE
      DO 410 IW=1,LCA
      IF(LWPJ(IW+JMZ).LT.1.E-3)LWPJ(IW+JMZ)=ALEQ2(IW+JMZ)*1.E-12
     1+FLOAT(IW)*1.E-15
      STUM3(IW)=LWPJ(IW+JMZ)
  410 CONTINUE
      LX=JMZ
      JMZ=LCA
      JMDZ=LCA
      CALL JOBST2(ORD2,LCA,STUM3)
      GO TO 380
 6001 FORMAT(//12X,11HOPTION 2 = ,I1,1X,27HHAS NOT BEEN PROGRAMMED YET/
     1 9X,21HTRY OPTION 2 = 0 OR 1)
 6002 FORMAT(/12X,27HNO DATA FOR EQUIPMENT CODE ,I4)
 6130 FORMAT(///)
 6131 FORMAT(//12X,70H**************************************************
     1********************, //12X,25HTOTAL NUMBER OF PERSONNEL,26X,I6,/
     212X,46HTOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN), 5X,I6/
     312X,46HTOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.), 5X,I6/
     412X,46HTOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN), 5X,I6/
     512X,46HTOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.), 5X,I6/
     612X,32HLEVEL WEIGHTED POPULATION (MEAN),18X,F9.1/
     712X,32HLEVEL WEIGHTED POPULATION (W.C.),18X,F9.1//
     812X,70H**********************************************************
     9************)
 6102 FORMAT(1H1 //////12X,9A4,15X,12HBBN JOB NO. ,I6//22X,50HBACKGROUN
     1D AND EQUIPMENT NOISE DATA AVERAGES (LEQ)/)
 6103 FORMAT(/12X,6HEQUIP.,7X,16H GENERIC NAME   ,6X,7HNO. OF ,6X,
     18H  MEAN  ,6X,5HSTD. ,/12X,6H CODE , 29X,7HSAMPLES,6X,8HLEQ(DBA),
     26X,5HDEV. ,/)
 6104 FORMAT(13X,14,7X,5A4,4X,I4,  9X,F5.1,7X,F5.2)
 6105 FORMAT(1H1  //////12X,9A4,15X,12HBBN JOB NO. ,I6,
     120X,14HALTERNATIVE = ,I2,
     2//36X,22HEQUIPMENT NOISE IMPACT/)
 6106 FORMAT(/12X,6HEQUIP.,3X,17H    EQUIPMENT    ,3X,5HNO.OF,3X,
     14HMEAN,3X,4HW.C.,3X,5HNO.OF,2X, 8HPRIORITY,1X,5HNORM./
     2                  12X,6H CODE ,3X,17H   DESCRIPTION   ,3X,5HUNITS,
     33X,4H LJ ,3X,4H LJ ,3X,5HPERS.,3X,5HINDEX,3X,4HP.I./)
 6107 FORMAT(13X,I4,4X,5A4,I4,3X,F5.1,2X,F5.1,1X,I6,1X,F8.1,1X,F6.3)
 6108 FORMAT(/13X,3HJOB,3X,20H  JOB DESCRIPTION   ,3X, 6HNO. OF,3X,
     112HSOUND  LEVEL, 4X,14HLEV. WT. POP. ,/12X,4HCODE,26X,6HPERS. ,
     24X,5HMEAN ,2X,5HW.C. ,3X,6H MEAN ,2X,6H W.C. /)
 6109 FORMAT(11X,I5,5X,5A4,I6,   4X,F5.1,2X,F5.1,2X,I7,1X,I7)
 6110 FORMAT(1H1  //////12X,9A4,15X,12HBBN JOB NO. ,I6//29X,35HPERSONNEL
     1 NOISE EXPOSURE AND IMPACT/)
 6120 FORMAT(26X,41HAFTER NOISE CONTROL ON SELECTED EQUIPMENT/)
 6301 FORMAT(11X,I5,5X,5A4,I6,   4X,5H<75.0,2X,5H<75.0,2X,I7,1X,I7)
 6302 FORMAT(11X,I5,5X,5A4,I6,   4X,5H<75.0,2X,F5.1   ,2X,I7,1X,I7)
 6202 FORMAT(1H1  //////12X,9A4,15X,12HBBN JOB NO. ,I6//24X,47HEQUIPMENT
     1 NOISE DATA AVERAGES (LEQ) GENERALIZED/)
 6111 FORMAT(1H1  //////12X,9A4,15X,12HBBN JOB NO. ,I6,
     120X,14HALTERNATIVE = ,I2,
     2//29X,31HEQUIPMENT NOISE IMPACT AVERAGES/)
 6112 FORMAT(1H1  //////12X,9A4,15X,12HBBN JOB NO. ,I6//25X,44HPERSONNEL
     1 NOISE EXPOSURE AND IMPACT AVERAGES/)
 6210 FORMAT(40X,12HEPA CRITERIA/)
  400 CONTINUE
  810 CONTINUE
      RETURN
      END
      SUBROUTINE SORTWC(NPLT,NTOT,KI,IZ,OPTST)
      IMPLICIT INTEGER (O)
      REAL*8 JCODE,KCC,KH*4
      DIMENSION JDES(5),KDES(5),M(10),H(10),KM(10),MX(200,10),NP(200),
     1STDN(200,10),HN(200,10),CNORM(200,10),SNORM(200,10),JCODE(200),LTS
     1T(200),KH(10)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/ISICP/ ICS(20),IPS(20,50),INO(20)
      COMMON/NCOM/NOM(10000)
      COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
C    THIS SUBROUTINE SORTS WORKER CATEGORIES INTO SUBCATEGORIES AND
C    AVERAGES UP TO A 3 DIGIT SIC CODE
      LF=0
C    READ THE FIRST LINE OF DATA BANK DATA
      I=0
      JTST=ITST(KI)
      IF(OPT(23).EQ.0)GO TO 20
      JTST=10
      DO 10 IP=1,NPLT
      JTST=MIN0(JTST,ITST(IP))
   10 CONTINUE
   20 CONTINUE
      READ(40)        JCO,(JDES(J),J=1,5),JNP,(M(JJ),H(JJ),JJ=1,10),JDATE
     1,MLT1
      IF(JNP.EQ.0)GO TO 20
      JC=JCO-1000   *(JCO/1000)
      JC1=JCO/1000000
   60 READ(40,END=80)KCO,(KDES(J),J=1,5),KNP,(KM(JJ),KH(JJ),JJ=1,10),
     1JDATE
     1,MLT1
      IF(KNP.EQ.0)GO TO 60
      KC=KCO-1000*(KCO/1000)
      KC1=KCO/1000000
      GO TO 70
   80 LF=1
      REWIND 40
   70 IF(I.EQ.0)GO TO 150
C
C     TEST TO SEE IF ANY PREVIOUS MACHINE COMBINATIONS ARE SIMILAR TO
C     THE CURRENT ONE
C
      DO 110 K=1,I
      DO 120 J=1,10
      DO 130 L=1,10
      IF(M(J).EQ.0.AND.MX(K,J).NE.0)GO TO 110
      IF( M(J).EQ.MX(K,L))GOTO 140
  130 CONTINUE
```

```
      GO TO 110
  140 CONTINUE
  120 CONTINUE
      GO TO 180
  110 CONTINUE
  150 I=I+1
      LTST(I)=1
      NP(I)=JNP
C    NOW NORMALISE THE H(J)
      HXTOT=0.0
      DO 160 L=1,10
      HXTOT=HXTOT+H(L)
  160 CONTINUE
      DO 170 L=1,10
      HN(I,L)=H(L)*JNP/HXTOT
      STDN(I,L)=(HN(I,L)**2)/JNP
      MX(I,L)=M(L)
  170 CONTINUE
      JCODE(I)=DFLOAT(JC1)*100000000.0+JC*100+I-1
      IF(JTST.EQ.4)JCODE(I)=DFLOAT(JCO)*100.0+I-1
      IF(JTST.EQ.3)JCODE(I)=JC  *100+I-1+(10000000.*DFLOAT(JCO/100000))
      GO  TO 205
C
C    WE NOW COMBINE TWO BLOCKS OF DATA CONTAINING THE SAME EQUIPMENT
C    NORMALISE THE NEWLY ACQUIRED DATA FIRST
C
  180 HXTOT=0.0
      DO 190 L=1,10
      HXTOT=HXTOT+H(L)
  190 CONTINUE
      DO 270 J=1,10
      DO 280 L=1,10
      IF(M(J).EQ.0)GO TO 200
      IF(M(J).NE.MX(K,L))GO TO 280
      GO TO 290
  280 CONTINUE
      GO TO 270
  290 HN(K,L)=HN(K,L)+H(J)*JNP/HXTOT
      STDN(K,L)=STDN(K,L)+(H(J)/HXTOT)**2*JNP
  270 CONTINUE
  200 CONTINUE
      LTST(K)=LTST(K)+1
      NP(K)=NP(K)+JNP
  205 CONTINUE
      IF(LF.EQ.1)GO TO 230
      JCO=KCO
      JNP=KNP
      DO 210 L=1,10
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            M(L)=KM(L)
            H(L)=KH(L)
  210       CONTINUE
            IF(JC.EQ.KC.AND.JC1.EQ.KC1)GO TO 60
  230       CONTINUE
C     CALCULATE STATISTICAL DATA FOR WORKER CATEGORY UNDER CONSIDERATION
C
            DO 340 JG=1,I
            J=I-JG+1
            ANP=FLOAT(NP(J))
            CTOT=0.0
            DO 250 L=1,10
            CTOT=CTOT+HN(J,L)/ANP
  250       CONTINUE
            DO 260 L=1,10
            CNORM(J,L)=HN(J,L)/(ANP*CTOT)
  260       CONTINUE
            IF(LTST(J).EQ.1)GO TO 480
            DO 470 L=1,10
            FUNCT=(ANP*STDN(J,L)-HN(J,L)*HN(J,L))/(ANP*(ANP-1.0))
            IF(FUNCT.LE.1.E-10)GO TO 465
            SNORM(J,L)=SQRT(FUNCT)/CTOT
            GO TO 470
  465       CONTINUE
            SNORM(J,L)=0.0
  470       CONTINUE
            GO TO 300
  480       CONTINUE
            DO 490 L=1,10
            SNORM(J,L)=0.0
  490       CONTINUE
  300       CONTINUE
            WRITE(31) JCODE(J),(JDES(L),L=1,5),(MX(J,LL),CNORM(J,LL),
           1SNORM(J,LL),LL=1,10),NP(J)
  340       CONTINUE
            IF(LF.EQ.1)GO TO 350
            JC=KC
            JC1=KC1
            JC0=KC0
            I=0
            DO 345 L=1,5
            JDES(L)=KDES(L)
  345       CONTINUE
            GO TO 60
  350       CONTINUE
            END FILE 31
            REWIND 31
C
```

```
C    NOW WRITE OUT PERSONNEL WORK ASSIGNMENT AVERAGES
C
      IF(OPTST.EQ.1)GO TO 400
      IF(OPT(18).NE.0)GO TO 400
  355 WRITE(6,6002) (NAME(J),J=1,9),JBNJNO
      WRITE(6,6001)
      NLN=40
      CALL WRITE1(IZ,KI,   ND3,   ND4,NTOT,NPLT,NLN)
      NLT=NLN-5
      WRITE(6,6003)
C    NOW WRITE OUT LIST
      NZT=0
      DO 360 IL=1,45
      READ(31,END=390) KCC,(JDES(L),L=1,5),(M(LL),H(LL),KH(LL),LL=1,10)
     1,NPPS
      NZT=NZT+1
      H(1)=H(1)*8.0
      KH(1)=KH(1)*8.0
      JD=IDINT(KCC-100000.0*DFLOAT(IDINT(KCC/100000.0))+0.1)
      WRITE(6,6004) JD,(JDES(L),L=1,5),NPPS,M(1),H(1),KH(1)
      DO 370 IP=2,10
      IF(M(IP).EQ.0)GO TO 380
      NZT=NZT+1
      H(IP)=H(IP)*8.0
      KH(IP)=KH(IP)*8.0
      WRITE(6,6005) M(IP),H(IP),KH(IP)
  370 CONTINUE
  380 CONTINUE
      NZT=NZT+1
      WRITE(6,6006)
      IF(NZT.GE.NLT)GO TO 355
  360 CONTINUE
  390 REWIND 31
  400 CONTINUE
 6001 FORMAT(/30X,34HPERSONNEL WORK ASSIGNMENT AVERAGES/)
 6004 FORMAT(12X,I5,3X,5A4,3X,I5,5X,I4,7X,F3.1,9X,F4.2)
 6002 FORMAT(1H1  //////12X,9A4,15X,12HbbN JOB NO. ,I6/)
 6003 FORMAT(/13X,3HJOB,6X,15HJOB DESCRIPTION,6X,6HNO. OF,3X,6HEQUIP.,
     13X,9HNOR. MEAN,3X,9HNOR. STD./12X,4HCODE,27X,5HPERS.,5X,4HCODE,
     24X,9HTIME-8HRS,3X,9HDEVIATION/)
 6005 FORMAT(53X,I4,7X,F3.1,9X,F4.2)
 6006 FORMAT(12X)
      RETURN
      END
      SUBROUTINE MCDT(NTP,KMC,JBL,NPLT,I,NPLTI,MKSIC,LADD)
      IMPLICIT INTEGER (O)
      REAL*8 MC
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(500),
     1JTC(150),JTC2(150),AINC,DY,ANTH,EQLV,NEN,NACC
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/EMC/MCODE(5),MNAME(5),IDATE
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/NCOM/NOM(10000)
C
C   THIS SUBROUTINE SEARCHES FOR SOME MACHINE DATA OUTSIDE THE GIVEN
C   DATES IF NONE EXISTS BETWEEN THEM
C
      WRITE(6,6001) KMC
      NDT1=0
      KBT=1
      MSJP=0
      NTST1=0
      NTST2=0
      NTST3=0
      LF=1
      JADD=JBL+1
      NDT2=0
      DO 30 IS=I,NPLTI
      KTST2=ITST(IS)
      KTST1=NTST(IS)
   10 READ(NTP,END=25) MC,(MNAME(J),J=1,5),ALEQ,(LCODE(J),DEC(J),J=1,3),
     1IDATE
     1,MLT1
      MCODED=IDINT(MC/100000000.0)*100
      MCODE(1)=IDINT(MC/100000000.0)*MLT1
      MCODE(2)=IDINT(MC/10000000.0)*MLT1
      MCODE(3)=IDINT(MC/1000000.0)
      MCODE(4)=IDINT(MC/10000.0)-MCODE(3)*100
      MCODE(5)=IDINT(MC-10000.0*DFLOAT(IDINT(MC/10000.0))+0.1)
      MCODE(3)=IDINT(MC/1000000.0)*MLT1
      IF(KMC.EQ.MCODE(5).AND.OPT(7).EQ.1)GO TO 20
      IF(KMC.EQ.MCODE(5).AND.NTST(IS).EQ. MCODE(ITST(IS)))GO TO 20
      IF(KMC.EQ.MCODE(5).AND.MCODE(4).EQ.0.AND.MCODED  .EQ.MKSIC)GO TO24
      GO TO 10
   24 CONTINUE
      MSJP=1
   20 LF=0
      KCOD=LCODE(1)
      KADD=0
      IF(OPT(27).EQ.0)KCOD=0
      IF(KCOD.EQ.0)GO TO 1335
      DO 1332 J=1,3
      DCD1(LADD,J)=DEC(J)
      LCD1(LADD,J)=LCODE(J)
      IF(LCODE(J).NE.0)KADD=KADD+1
 1332 CONTINUE
 1335 CONTINUE
      CALL ZC(JADD,LKTST,NDT1,KBT,NTST1,NTST2,ALEQ,NTP,NDT2,KTST1,KTST2,
     1LADD,KCOD,MKSIC,MSUP,NTST3,KADD,NPLT)
   25 REWIND NTP
   30 CONTINUE
      IF(LF.EQ.0)GO TO 40
      WRITE(6,6002) KMC
      GO TO 200
   40 CONTINUE
      JTT=     JBL+1
      SUM=0.0
      SUM2=0.0
      ISUM=0
      J2=0
      DO 100 IB=JTT,JADD
      SUM=SUM+ALEQ2(IB)
      SUM2=SUM2+STDAM(IB)**2*(JSEQ(IB)-1)
      ISUM=ISUM+JSEQ(IB)
      J2=J2+1
  100 CONTINUE
      ALEQ2(JTT)=SUM1/ISUM
      IF(J2.EQ.ISUM.OR.SUM2.EQ.0)GO TO 110
      STDAM(JTT)=SQRT(SUM2/(ISUM-J2))
  110 JSEQ(JTT)=ISUM
      JARR(JTT)=KMC
      JBL=JBL+1
      NOM(KMC)=JTT
 6001 FORMAT(//12X,29HTHERE IS NO DATA FOR MACHINE ,I4,27HBETWEEN THE DA
     1TES SPECIFIED/12X,36HNOW LOOK OUTSIDE THE DATES SPECIFIED/)
 6002 FORMAT(//12X,41HNO DATA AT ALL EXISTS FOR MACHINE NUMBER ,I4/)
  200 RETURN
      END
      SUBROUTINE WRITE1(I,KI,IDATE3,IDATE4,NTOT,NPLT,NLN)
      IMPLICIT INTEGER (O)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
      COMMON/ISICP/ICS(20),IPS(20,50),INO(20)
      COMMON/NCOM/NCM(10000)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      DIMENSION IDATE3(50),IDATE4(50)
      NP1=1900+IDATE3(KI)
      NP2=1900+IDATE4(KI)
      JTST=ITST(KI)
      IF(OPT(23).EQ.0)GO TO 5
      NP1=100
      NP2=0
      JTST=10
      DO 2 IP=1,NPLT
      JTST=MIN0(JTST,ITST(IP))
      IF(NPL(IP).LT.0)JTST=5
      NP1=MIN0(NP1,IDATE3(IP))
      NP2=MAX0(NP2,IDATE4(IP))
    2 CONTINUE
      NP1=NP1+1900
      NP2=NP2+1900
      GO TO 6
    5 CONTINUE
      IF(NPL(KI).LT.0)JTST=5
    6 CONTINUE
      IF(NP1.EQ.1900.AND.NP2.EQ.1900)GO TO 100
      IF(OPT(7).EQ.0)GO TO 10
      WRITE(6,6001) NTOT,NP1,NP2
      GO TO 200
   10 CONTINUE
      IF(OPT(23).EQ.0)GO TO 40
      IF(JTST.EQ.1.OR.JTST.EQ.2.OR.JTST.EQ.3)GO TO 20
      IF(JTST.EQ.5)GO TO 25
      DO 15 IJ=1,I
      WRITE(6,6002) ICS(IJ),NP1,NP2
      ID=1
      IB=ID+11
   11 CONTINUE
      IF(IB.GT.INO(IJ))IB=INO(IJ)
      WRITE(6,6003) (IPS(IJ,IL),IL=ID,IB)
      IF(IB.GE.INO(IJ))GO TO 15
      ID=ID+12
      IB=ID+11
      NLN=NLN-1
      GO TO 11
   15 CONTINUE
      GO TO 200
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82<

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   20 WRITE(6,6006)
      DO 30 IJ=1,I
      WRITE(6,6007) ICS(IJ),INO(IJ)
      NLN=NLN-1
   30 CONTINUE
      GO TO 200
   25 CONTINUE
      WRITE(6,6106) NP1,NP2
      WRITE(6,6107)(ICS(IJ),IJ=1,I)
      NLN=NLN-1
      GO TO 200
   40 IF(JTST.EQ.1.OR.JTST.EQ.2.OR.JTST.EQ.3)GO TO 60
      IF(JTST.EQ.5)GO TO 70
      WRITE(6,6008) ICS(1),IPS(1,1),NP1,NP2
      GO TO 200
   60 CONTINUE
      ID=1
      IB=ID+11
      WRITE(6,6002)ICS(1),NP1,NP2
   61 CONTINUE
      IF(IB.GT.INO(1))IB=INO(1)
      WRITE(6,6003)(IPS(1,IL),IL=ID,IB)
      IF(IB.GE.INO(1))GO TO 200
      NLN=NLN-1
      ID=ID+12
      IB=ID+11
      GO TO 61
   70 CONTINUE
      WRITE(6,6039) ICS(1),NP1,NP2
      GO TO 200
  100 IF(OPT(7).EQ.0)GO TO 110
      WRITE(6,6011) NTOT
      GO TO 200
  110 CONTINUE
      IF(OPT(23).EQ.0) GO TO 240
      IF(JTST.EQ.5)GO TO 125
      IF(JTST.EQ.1.OR.JTST.EQ.2.OR.JTST.EQ.3)GO TO 120
      DO 150 IJ=1,I
      ID=1
      IB=ID+11
      WRITE(6,6012) ICS(IJ)
  111 CONTINUE
      IF(IB.GT.INO(IJ))IB=INO(IJ)
      WRITE(6,6013) (IPS(IJ,IL),IL=ID,IB)
      IF(IB.GE.INO(IJ))GO TO 150
      ID=ID+12
      IB=ID+11
      NLN=NLN-1
      GO TO 111
  150 CONTINUE
      GO TO 200
  120 WRITE(6,6016)
      DO 130 IJ=1,I
      WRITE(6,6007) ICS(IJ),INO(IJ)
      NLN=NLN-1
  130 CONTINUE
      GO TO 200
  125 CONTINUE
      WRITE(6,6116)
      WRITE(6,6107) (ICS(IJ),IJ=1,I)
      NLN=NLN-1
      GO TO 200
  240 IF(JTST.EQ.1.OR.JTST.EQ.2.OR.JTST.EQ.3)GO TO 160
      IF(JTST.EQ.5)GO TO 170
      WRITE(6,6018) ICS(1),IPS(1,1)
      GO TO 200
  160 CONTINUE
      ID=1
      IB=ID+11
      WRITE(6,6012) ICS(1)
  161 CONTINUE
      IF(IB.GT.INO(1))IB=INO(1)
      WRITE(6,6013) (IPS(1,IL),IL=ID,IB)
      IF(IB.GE.INO(1))GO TO 200
      NLN=NLN-1
      ID=ID+12
      IB=ID+11
      GO TO 161
  170 CONTINUE
      WRITE(6,6029) ICS(1)
  200 CONTINUE
 6001 FORMAT(12X,23HALL SIC CODES SPECIFIED, 3X,17H NO. OF PLANTS = ,
     1I2, 4X, 8HPERIOD: ,I4,4H TO ,I4)
 6002 FORMAT(12X,11HSIC CODE = ,I4,34X,
     18HPERIOD: ,I4,4H TO ,I4)
 6003 FORMAT(12X,13HPLANT NOS. = ,12(I3,1H,))
 6004 FORMAT(25X,16I3)
 6005 FORMAT(12X,29HTOO MANY PLANTS FOR SIC CODE ,I4,/12X,55HINCREASE
     1ARRAY SIZE IN SUBROUTINE WRITE1 TO AT LEAST ,I3,25H AND CHANGE
     2SOME LOGIC)
 6006 FORMAT(12X, 8HSIC CODE,14X,13HNO. OF PLANTS,14X,
     18HPERIOD: ,I4,4H TO ,I4)
 6007 FORMAT(14X,I4,20X,I3)
 6008 FORMAT(12X, 11HSIC CODE = ,I4 ,11X,12HPLANT NO. = ,  I2, 9X,
     18HPERIOD: ,I4,4H TO ,I4)
 6009 FORMAT(12X,11HSIC CODE = ,I4, 9X,15HNO. OF PLANTS = ,I2, 7X,
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84<

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    18HPERIOD: ,I4,4H TO ,I4)
 6011 FORMAT(12X,23HALL SIC CODES SPECIFIED, 5X,17H NO. OF PLANTS = ,
    1I2, 5X,18HNO DATES SPECIFIED)
 6012 FORMAT(12X,11HSIC CODE = ,I4,36X,16HNO DATES SPECIFIED)
 6013 FORMAT(12X,13HPLANT NOS. = ,12(I3,1H,))
 6016 FORMAT?12X,8H IC CODE,14X,13HNO. 0  PLANTS,14X,
    118HNO DATES SPECIFIED)
 6018 FORMAT(12X,11HSIC CODE = ,I4,12X,12HPLANT NO. = ,I2,10X,
    118HNO DATES SPECIFIED)
 6019 FORMAT(12X,11HSIC CODE = ,I4,10X,16HNO. OF PLANTS = ,I2, 8X,
    118HNO DATES SPECIFIED)
 6029 FORMAT(12X,11HSIC CODE = ,I4, 9X,20HAVERAGE FOR INDUSTRY,7X,
    118HNO DATES SPECIFIED)
 6039 FORMAT(12X,11HSIC CODE = ,I4, 8X,20HAVERAGE FOR INDUSTRY,6X,
    18HPERIOD: ,I4,4H TO ,I4)
 6106 FORMAT(12X,41HINDUSTRY AVERAGES FOR FOLLOWING SIC CODES,10X,
    18HPERIOD: ,I4,4H TO ,I4)
 6107 FORMAT(12X,16I3)
 6116 FORMAT(12X,41HINDUSTRY AVERAGES FOR FOLLOWING SIC CODES,10X,
    118HNO DATES SPECIFIED)
      RETURN
      END
      SUBROUTINE JOBSRT(JSTO,N)
      DIMENSION JSTO(600),KSP(500),KSSC3(500)
      COMMON/ISORT/KKP(600),KSIC3(600)
C     THIS SUBROUTINE SORTS ARRAY JNP IN DESCENDING ORDER OF MAGNITUDE
C     IF ANY TWO ELEMENTS ARE EQUAL, THE CORRESPONDING ELEMENTS IN KSIC3
C     ARE SORTED IN DESCENDING ORDER
      DO 5 II=1,N
      KSP(II)=KKP(II)
      KSSC3(II)=KSIC3(II)
    5 CONTINUE
      DO 10 I=1,N
      JSTO(I)=1
      IBT=KSP(1)
      KBT=KSSC3(1)
      DO 20 K=1,N
      IF(IBT.GT.KSP(K))GO TO 20
      IF(IBT.NE.KSP(K))GO TO 30
      IF(KBT.GT.KSSC3(K))GO TO 20
      JSTO(I)=K
      KBT=KSSC3(K)
      GO TO 20
   30 JSTO(I)=K
      KBT=KSSC3(K)
      IBT=KSP(K)
   20 CONTINUE
      KSP(JSTO(I))=0
      KSSC3(JSTO(I))=0
   10 CONTINUE
      RETURN
      END
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1  RELEASE 2.0                 JOBST1               DATE = 81141           20/44/01
          SUBROUTINE JOBST1(JSTO,N,JCODE1)
          DIMENSION JSTO(600),JBN(600),JCODE1(600)
      C
      C   THIS SUBROUTINE SORTS ARRAY JCODE1 IN DESCENDING ORDER OF MAGNITUDE
      C   THE ORDER IS STORED IN ARRAY JSTO
      C
          DO 5 I=1,N
          JBN(I)=JCODE1(I)
        5 CONTINUE
          DO 10 I=1,N
          JSTO(I)=1
          IBT=JBN(1)
          DO 20 K=1,N
          IF(IBT.GT.JBN(K))GO TO 20
          JSTO(I)=K
          IBT=JBN(K)
       20 CONTINUE
          JBN(JSTO(I))=0
       10 CONTINUE
          RETURN
          END
      SUBROUTINE JOBST2(ORD2,N,AWP)
      IMPLICIT INTEGER (O)
      DIMENSION ORD2(500),AWP(500),AN(500)
C
C   THIS SUBROUTINE SORTS ARRAY AWP INTO DESCENDING ORDER AND STORES
C   THIS ORDER IN ORD2
C
      DO 5 I=1,N
      AN(I)=AWP(I)
    5 CONTINUE
      DO 10 I=1,N
      ORD2(I)=1
      ABT=AN(1)
      DO 20 K=1,N
      IF(ABT.GT.AN(K))GO TO 20
      ORD2(I)=K
      ABT=AN(K)
   20 CONTINUE
      AN(ORD2(I))=0.0
   10 CONTINUE
      RETURN
      END
      SUBROUTINE JOBST3(JSTO,N,JCODE1)
      REAL*8 JBN,JCODE1,IBT
      DIMENSION JSTO(600),JBN(600),JCODE1(600)
C
C    THIS SUBROUTINE SORTS ARRAY JCODE1 IN DESCENDING ORDER OF MAGNITUDE
C    THE ORDER IS STORED IN ARRAY JSTO
C
      DO 5 I=1,N
      JBN(I)=JCODE1(I)
    5 CONTINUE
      DO 10 I=1,N
      JSTO(I)=1
      IBT=JBN(1)
      DO 20 K=1,N
      IF(IBT.GT.JBN(K))GO TO 20
      JSTO(I)=K
C    FIRST OF ALL RANK ORDER LWP ARRAY
      IBT=JBN(K)
   20 CONTINUE
      JBN(JSTO(I))=0
   10 CONTINUE
      RETURN
      END
      SUBROUTINE NPSC(I,NTOT,IB)
      IMPLICIT INTEGER (O)
      COMMON/ISORD/ ORD2(600),NPEOP(600),MULT1(600)
      COMMON/ISICP/ ICS(20),IPS(20,50),IND(20)
      DIMENSION JDES(5),MX(10),CN(10)
C
C    THIS SUBROUTINE FINDS THE NO OF PLANTS AND THEIR CORRESPONDING
C    ID NUMBERS FOR EACH SIC CODE CONSIDERED
      NTOT=0
      IC1=0
      I=0
      J=1
      DO 10 JCB=1,IB
      IC2=IC1
      JCODE=NPEOP(ORD2(JCB))
C
      IC1=JCODE/100000
      IP1=JCODE/1000-IC1*100
      IF(IC1.EQ.IC2)GO TO 20
      I=I+1
      ICS(I)=IC1/MULT1(ORD2(JCB))
      IPS(I,1)=IP1
C     I=NO OF DIFFERENT SIC CODES CONSIDERED
C     J=NO OF DIFFERENT PLANTS FOR A GIVEN SIC CODE
      IF(I.EQ.1)GO TO 10
      IND(I-1)=J
      NTOT=NTOT+J
      J=1
      GO TO 10
   20 DO 50 K=1,J
      IF(IP1.EQ.IPS(I,J))GO TO 10
   50 CONTINUE
      J=J+1
      IPS(I,J)=IP1
   10 CONTINUE
      IND(I)=J
      NTOT=NTOT+J
      RETURN
      END
      SUBROUTINE WRITE2(OPTST,JA,NRUN,LCA,JMAX,IR,I,NPLT,NTOT,JBL,NTIS
     2,KKK,JMD2)
      IMPLICIT INTEGER (U)
      REAL L8I,L8IWC,LWP,LWPWC,LWPJ,LWPWCJ,LWPN,LWPWCN,LIJ,LIJWC
     1,JCODE2*8
      COMMON/COSHA/ SWH(10),SLEVWC(10),            JDES(5),M(10),H(10),
     1HS(10),NEXPWC,    JCODE(5),LWPJ(500),LWPN(500),NEXP,LADD
     7,KDATA(5)
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/EQ2/ALEQ3(500),STDM3(500),KNAME2(500,5),JARR3(500),JSEQ3(50
     10)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
      COMMON/OD/MAC1(500),MAC2(50),MAC3(50),JCODE2(50),NSC(50)
      COMMON/NCOM/NOM(10000)
      COMMON/NWC/LWP(500),LWPWC(500),NT90,NW90,NT75,NW75,NTTO,LSTO(500),
     1KSTO(500),L8I(500),L8IWC(500),SUM,SUMWC,LNT90,LNT75,LNW90,LNW75,
     2AL82(500),AL82WC(500),ALVP(500),ALVPWC(500),NUMP(500),JOBC(500),
     3NSTO(500),MSTO(500),NJ(500),JE,ORD(500),JBDES2(50,5),RSUM,RSUMWC
      COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
      COMMON/ISICP/ICS(20),IPS(20,50),IND(20)
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
     1JTC(150),JTC2(150),AINC,DY,ANTH,EQLV,NEN,NACC
      COMMON/ISORD/ ORD2(600),NPEOP(600),MOLT1(600)
C
C   THIS SUBROUTINE WRITES OUT THE PERSONNEL EXPOSURE AND EQUIPMENT
C   IMPACT DATA FOR RESULTS IN OSHA FORMAT
C
      IF(KKK.EQ.2)GO TO 998
      CALL JOBST2(LSTO,JA,LWP)
      CALL JOBST2(KSTO,JA,L8I)
C
C   NOW WRITE OUT PERSONNEL NOISE EXPOSURE AND IMPACT DATA
C
      IF(OPT(19).NE.0)GO TO 300
      NB=0
  260 CONTINUE
      NLN=36
      WRITE(6,6103)(NAME(J),J=1,9),JBNJNO
      WRITE(6,6002)
      IF(OPTST.EQ.0)GO TO 265
      WRITE(6,6006)
      NLN=NLN-2
  265 CONTINUE
      IF(NTIS.EQ.1)WRITE(6,6021)
      WRITE(6,6007) ANTH,EQLV,NEN
      CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      WRITE(6,6008)
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C     NOW WRITE OUT LIST
      NZT=0
      DO 270 IL=1,45
      NZT=NZT+1
      NB=NB+1
      IF(NB.GT.JA)GO TO 280
      AC=     LWP(LSTO(NB))
      AH=     LWPHC(LSTO(NB))
      AL1=L8I(LSTO(NB))
      AL2=L8IHC(LSTO(NB))
      IF(AL1.LT.ANTH.AND.AL2.LT.ANTH)GO TO 266
      IF(AL1.LT.ANTH.AND.AL2.LT.ANTH)GO TO 266
      IF(AL1.LT.ANTH)GO TO 267
      WRITE(6,6009) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),AL1,AL2,AC,AH
      GO TO 269
  266 WRITE(6,6011) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),ANTH,ANTH,AC,AH
      GO TO 269
  267 WRITE(6,6010) JARR3(LSTO(NB)),(KNAME2(LSTO(NB),J),J=1,5),
     1JSEQ3(LSTO(NB)),ANTH,AL2,AC,AH
  269 CONTINUE
      IF(NZT.GE.NLN)GO TO 260
  270 CONTINUE
  280 CONTINUE
      DO 590 JZ=1,JA
      JOBC(JZ)=JARR3(JZ)/100
      NUMP(JZ)=0
      AL82(JZ)=0.0
      ALVP(JZ)=0.0
      AL82HC(JZ)=0.0
      ALVPHC(JZ)=0.0
  590 CONTINUE
      JB=0
      DO 595 JZ=1,JA
      IF(L8I(JZ).LE.65.0)L8I(JZ)=65.0
      IF(L8IHC(JZ).LE.65.0)L8IHC(JZ)=65.0
  595 CONTINUE
      DO 600 JZ=1,JA
      IF(JOBC(JZ).EQ.0)GO TO 600
      NAV=0
      JB=JB+1
      JOBC(JB)=JOBC(JZ)
      NJ(JB)=JZ
      DO 640 IZ=JZ,JA
      IF(JOBC(IZ).NE.JOBC(JB))GO TO 640
      IF(JB.EQ.IZ)GO TO 610
      JOBC(IZ)=0
  610 CONTINUE
      NUMP(JB)=NUMP(JB)+JSEQ3(IZ)
      NAV=NAV+JSEQ3(IZ)
      ALVP(JB)=ALVP(JB)+LWP(IZ)*JSEQ3(IZ)
      ALVPWC(JB)=ALVPWC(JB)+LWPWC(IZ)*JSEQ3(IZ)
  640 CONTINUE
      IF(NAV.EQ.0)GO TO 615
      ALVP(JB)=ALVP(JB)/NAV
      ALVPWC(JB)=ALVPWC(JB)/NAV
      IF(ALVPWC(JB).LE.1.E-5)GO TO 615
      AL82WC(JB)=3.322*ALOG10(ALVPWC(JB))*NEN+EQLV
      IF(ALVP(JB).LE.1.E-5)GO TO 601
      AL82(JB)=3.322*ALOG10(ALVP(JB))*NEN+EQLV
      GO TO 600
  615 CONTINUE
      AL82WC(JB)=0.0
  601 CONTINUE
      AL82(JB)=ALVP(JB)*1.E-8+JB*1.E-12
  600 CONTINUE
      DO 605 NI=1,JB
      IF(ALVP(NI).LE.1.E-20)ALVP(NI)=AL82(NI)*1.E-12
  605 CONTINUE
      CALL JOBST2(MSTO,JB,ALVP)
      CALL JOBST2(NSTO,JB,AL82)
      NB=0
  660 CONTINUE
      NLN=36
      WRITE(6,6103)(NAME(J),J=1,9),JBNJNJ
      WRITE(6,6003)
      IF(OPTST.EQ.0)GO TO 665
      NLN=NLN-2
      WRITE(6,6006)
  665 CONTINUE
      IF(NTIS.EQ.1)WRITE(6,6021)
      WRITE(6,6007) ANTH,EQLV,NEN
      CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      WRITE(6,6008)
C   NOW WRITE OUT LIST
      NZT=0
      DO 670 IL=1,45
      NZT=NZT+1
      NB=NB+1
      IF(NB.GT.JB)GO TO 680
      AC=     ALVP(MSTO(NB))
      AW=     ALVPWC(MSTO(NB))
      AL1=AL82(MSTO(NB))
      AL2=AL82WC(MSTO(NB))
      IF(AL1.LT.ANTH.AND.AL2.LT.ANTH)GO TO 666
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          IF(AL1.LT.ANTH)GO TO 667
          WRITE(6,6009) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
         1NUMP(MSTO(NB)),AL1,AL2,AC,AW
          GO TO 669
      666 WRITE(6,6011) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
         1 NUMP(MSTO(NB)),ANTH,ANTH,AC,AW
          GO TO 669
      667 WRITE(6,6010) JOBC(MSTO(NB)),(KNAME2(NJ(MSTO(NB)),J),J=1,5),
         1 NUMP(MSTO(NB)),ANTH,AL2,AC,AW
      669 CONTINUE
          IF(NZT.GE.NLN)GO TO 660
      670 CONTINUE
      680 CONTINUE
      300 CONTINUE
          JE=JB
    C   WRITE OUT TOTAL EXPOSURE
          IF(OPT(19).EQ.1)GO TO 678
          IF(NZT.LE.23)GO TO 679
      678 CONTINUE
          WRITE(6,6103)(NAME(J),J=1,9),JBNJNO
          WRITE(6,6003)
          IF(OPTST.EQ.1)WRITE(6,6006)
          WRITE(6,6007) ANTH,EQLV,NEN
          CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      679 CONTINUE
          WRITE(6,6012)
          WRITE(6,6013) NTTO,NEXP,NEXPWC
          IF(NRUN.GT.1.AND.NTIS.EQ.0)GO TO 400
    C
    C   WRITE OUT EQUIPMENT IMPACT DATA
    C
    C   PUT ARRAY LWPN IN DESCENDING ORDER
    C
      998 CONTINUE
          LX=0
          OTST=0
          JMZ=JMAX-LCA
          CALL JOBST2(ORD2,JMZ,LWPJ)
      380 CONTINUE
          IF(OPT(16).NE.0)GO TO 400
          NB=0
      382 CONTINUE
          NLN= 26
          WRITE(6,6001)(NAME(J),J=1,9),JBNJNO,KKK
          IF(OTST.EQ.1)GO TO 383
          WRITE(6,6004)
          GO TO 384
      383 CONTINUE
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      WRITE(6,6005)
  384 CONTINUE
      IF(UPTST.EQ.0)GO TO 385
      NLN=NLN-2
      WRITE(6,6006)
  385 CONTINUE
      IF(NTIS.EQ.1)WRITE(6,6021)
      WRITE(6,6007) ANTH,EQLV,NEN
      CALL WRITE1(IR,I,ND3,ND4,NTOT,NPLT,NLN)
      WRITE(6,6014)
C   NOW WRITE OUT LIST
      NZT=0
      DO 390 IL=1,45
      NB=NB+1
      NZT=NZT+1
      ORD2(NB)=ORD2(NB)+LX
      IF(NB .GT.JMDZ)GO TO 395
      IF(NPEOP(ORD2(NB)).EQ.0)GO TO 395
      CWLJ=ALEQ2(ORD2(NB))+STDAM(ORD2(NB))
      AC=LWPJ(ORD2(NB))
      WRITE(6,6015) JARR(ORD2(NB)),(KNAM1(ORD2(NB),J),J=1,5),
     1JSEQ(ORD2(NB)),ALEQ2(ORD2(NB)),CWLJ,NPEOP(ORD2(NB)),AC,   LWPN(ORD
     22(NB))
      IF(NZT.GE.NLN)GO TO 382
  390 CONTINUE
  395 CONTINUE
      IF(OPT(24).EQ.0)GO TO 400
      IF(OTST.EQ.1)GO TO 400
      OTST=1
C   CALCULATE NUMBER OF PEOPLE ETC. TO WRITE IN DATA AVERAGES
      LD=JMAX-LCA+1
      DO 510 IZ=1,LCA
      DO 505 LZ=1,JMZ
      IF(JCHK(LZ).NE.0)GO TO 505
      IF(JARR(LZ).LE.MAC3(IZ).AND.JARR(LZ).GE.MAC2(IZ))GO TO 500
      IF(JARR(LZ).EQ.MAC1(IZ))GO TO 500
      GO TO 505
  500 CONTINUE
      LWPJ(IZ+JMZ)=LWPJ(IZ+JMZ)+LWPJ(LZ)
      LWPN(IZ+JMZ)=LWPN(IZ+JMZ)+LWPN(LZ)
      NPEOP(IZ+JMZ)=NPEOP(IZ+JMZ)+NPEOP(LZ)
  505 CONTINUE
  510 CONTINUE
      DO 410 IW=1,LCA
      IF(LWPJ(IW+JMZ).LT.1.E-3)LWPJ(IW+JMZ)=ALEQ2(IW+JMZ)*1.E-12
     1+FLOAT(IW)*1.E-15
      STDM3(IW)=LWPJ(IW+JMZ)
  410 CONTINUE
```

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      LX=JMZ
      JMDZ=LCA
      JMZ=LCA
      CALL JOBST2(ORD2,LCA,STUM3)
      GO TO 380
 6001 FORMAT(1H1//////12X,9A4,15X,12HBBN JOB NO. ,I6,
     120X,14HALTERNATIVE = ,I2)
 6021 FORMAT(31X,31HAFTER NOISE REDUCTION ITERATION/)
 6002 FORMAT(29X,35HPERSONNEL NOISE EXPOSURE AND IMPACT/)
 6003 FORMAT(25X,44HPERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES/)
 6004 FORMAT(/30X,32HEQUIPMENT NOISE CONTROL PRIORITY/)
 6005 FORMAT(/26X,41HEQUIPMENT NOISE CONTROL PRIORITY AVERAGES/)
 6006 FORMAT(26X,41HAFTER NOISE CONTROL ON SELECTED EQUIPMENT/)
 6007 FORMAT(30X,25HTHRESHOLD LEVEL         = ,F4.1,4H DBA/
     1       30X,25H8-HR PERMISSIBLE LEVEL = ,F4.1,4H DBA/
     2       30X,25HEXCHANGE RATE           = ,I1,4H DBA/)
 6008 FORMAT(/13X,3HJOB,3X,20H  JOB DESCRIPTION    ,3X,6HNO. OF,3X,
     112H SOUND LEVEL,3X,16HDAILY NOISE DOSE,/12X,4HCODE,26X,6HPERS. ,
     24X,5HMEAN ,2X,5HW.C. ,3X,5HMEAN ,2X,6H W.C. ,/)
 6009 FORMAT(11X,I5,5X,5A4,I6,   4X,F5.1,2X,F5.1,3X,F5.2,3X,F6.2)
 6010 FORMAT(11X,I5,5X,5A4,I6,   4X,1H<,F4.1,2X,F5.1,3X,F5.2,3X,F6.2)
 6011 FORMAT(11X,I5,5X,5A4,I6,   4X,1H<,F4.1,2X,1H<,F4.1,3X,F5.2,3X,F6.2
     1)
 6012 FORMAT(////)
 6013 FORMAT(//12X,70H**************************************************
     1********************//27X,33HTOTAL NUMBER OF PERSONNEL       =,I7/
     227X,34HTOTAL NUMBER OVEREXPOSED (MEAN) = ,I6/
     327X,34HTOTAL NUMBER OVEREXPOSED (W.C.) = ,I6//12X,70H*************
     4*********************************************************)
 6014 FORMAT(/12X,6HEQUIP.,3X,17H    EQUIPMENT    ,3X,5HNO.OF,3X,
     14HMEAN,3X,4HW.C.,2X,5HNO.OF,2X, 8HPRIORITY,2X,5HNORM./
     2                12X,6H CODE ,3X,17H   DESCRIPTION    ,3X,5HUNITS,
     33X,4H LJ ,3X,4H LJ ,2X,5HPERS.,3X,5HINDEX,4X,4HP.I./)
 6015 FORMAT(13X,I4,4X,5A4,I4,3X,F5.1,2X,F5.1,1X,I6,1X,F8.1,1X,F6.3)
 6103 FORMAT(1H1//////12X,9A4,15X,12HBBN JOB NO. ,I6/)
  400 RETURN
      END
      SUBROUTINE OSHA(LCA,NTP,JBL,NPLT,I,NPLTI,MKSIC,JMAX,JA,OPTST,IR,
     1NTOT)
      IMPLICIT INTEGER (O)
      REAL L8I,L8IHC,LWP,LWPHC,LWPJ,LWPHCJ,LWPN,LWPHCN,LIJ,LIJHC,KCC*8
     1,JCODE2*8
      COMMON/ISORD/ ORD2(600),NPEOP(600),MULT1(600)
      COMMON/COSHA/ SWH(10),SLEVWC(10),                JDES(5),M(10),H(10),
     1HS(10),NEXPWC,    JCODE(5),LWPJ(500),LWPN(500),NEXP,LADD
     2,KDATA(5)
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/EQ2/ALEQ3(500),STDM3(500),KNAME2(500,5),JARR3(500),JSEQ3(50
     10)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
      COMMON/OD/MAC1(500),MAC2(50),MAC3(50),JCODE2(50),NSC(50)
      COMMON/NCOM/NOM(10000)
      COMMON/NWC/LWP(500),LWPHC(500),NT90,NW90,NT75,NW75,NTTO,LSTO(500),
     1KSTO(500),L8I(500),L8IHC(500),SUM,SUMHC,LNT90,LNT75,LNW90,LNW75,
     2AL82(500),AL82HC(500),ALVP(500),ALVPHC(500),NUMP(500),JOBC(500),
     3NSTO(500),MSTO(500),NJ(500),JE,ORD(500),JBDES2(50,5),RSUM,RSUMHC
      COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
      COMMON/ISICP/ICS(20),IPS(20,50),IND(20)
      COMMON/LMIX/LMAX(150),LCOD1(150,10)
      COMMON/EMC/MCODE(5),MNAME(5),IDATE
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
     1JTC(150),JTC2(150),AINC,DY,ANTH,EQLV,NEN,NACC
      DIMENSION ARED(500),JTEST(200),JARR4(500),JRN(500),FMX(10)
C
C    THIS SUBROUTINE CALCULATES PERSONNEL EXPOSURES AND EQUIPMENT IMPACTS
C    USING OSHA CRITERIA
C
      FACN=1.0/2.0**((EQLV-ANTH)/NEN)
      NPOP=NPPP(I)
      PSUM=0.0
      JP=0
      NTIS=0
      JRUN=0
      JMZ=JMAX-LCA
      DO 60 IJ=1,500
      JRN(IJ)=0
      ARED(IJ)=0.0
   60 CONTINUE
      DO 65 IJ=1,200
      JTEST(IJ)=0
   65 CONTINUE
      IMZ=0
      DO 50 IJ=1,JMZ
      IF(JCHK(IJ).NE.0)GO TO 50
      IMZ=IMZ+1
      JARR4(IMZ)=JARR(IJ)
      JRN(IJ)=IMZ
   50 CONTINUE
      NRUN=0
   80 JA=0
      NTTO=0
      NEXP=0
      NEXPWC=0
C     CALCULATE AND WRITE OUT PERSONNEL EXPOSURE
  100 READ(31,END=240) KCC,(JOES(J),J=1,5),(M(JJ),H(JJ),HS(JJ),JJ=1,10),
     1NPRS
      IF(NPRS.EQ.0)GO TO 100
      IF(M(1).EQ.0)GO TO 100
      CTOT=0.0
      SLEV=0.0
      DO 130 IJ=1,10
      IF(M(IJ).EQ.0)GO TO 135
      SWH(IJ)=H(IJ)
      KJ=NOM(M(IJ))
      IF(KJ.NE.0)GO TO 110
      SLEVWC(IJ)=0.0
      GO TO 130
  110 CONTINUE
      SLEVWC(IJ)=ALEQ2(KJ)
      IF(ALEQ2(KJ).LE.SLEV)GO TO 130
      IK=IJ
      SLEV=ALEQ2(KJ)
  130 CONTINUE
C     NOW RENORMALIZE HOURS
  135 CONTINUE
      DO 160 IJ=1,10
      IF(M(IJ).EQ.0)GO TO 165
      KJ=NOM(M(IJ))
      IF(IJ.EQ.IK)GO TO 140
      GO TO 150
  140 CONTINUE
      SLEVWC(IJ)=ALEQ2(KJ)+STDAM(KJ)
      SWH(IJ)=H(IJ)+HS(IJ)
  150 CTOT=CTOT+SWH(IJ)
  160 CONTINUE
  165 CONTINUE
      DO 170 IJ=1,10
      IF(M(IJ).EQ.0)GO TO 175
      SWH(IJ)=SWH(IJ)/CTOT
  170 CONTINUE
  175 CONTINUE
      JA=JA+1
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          L8I(JA)=1.E-15
          L8IWC(JA)=0.0
          LWPWC(JA)=0.
          LWP(JA)=0.
          DO 230 IJ=1,10
          IF(M(IJ).EQ.0)GO TO 231
          KJ=NOM(M(IJ))
          IF(KJ.EQ.0)GO TO 230
          IF(KNAM1(KJ,3).EQ.KDATA(3))GO TO 230
          IF(M(IJ).EQ.1000)GO TO 230
      216 CONTINUE
          IF(ALEQ2(KJ).LE.ANTH)GO TO 215
          FIJ=FACN*H(IJ)*2.0**((ALEQ2(KJ)-ANTH)/NEN)*OPT(8)/4.0
          GO TO 218
      215 FIJ=ALEQ2(KJ)*1.E-30
          IF(SLEVWC(IJ).LE.ANTH)GO TO 220
      218 CONTINUE
          FIJWC=FACN*SWH(IJ)*2.0**((SLEVWC(IJ)-ANTH)/NEN)*OPT(8)/4.0
          GO TO 221
      220 FIJWC=0.0
      221 LWP(JA)=LWP(JA)+FIJ
          LWPWC(JA)=LWPWC(JA)+FIJWC
      230 CONTINUE
      231 CONTINUE
          IF(LWP(JA).GT.1.0)NEXP=NEXP+NPRS
          IF(LWPWC(JA).GT.1.0)NEXPWC=NEXPWC+NPRS
          IF(LWP(JA).LT.0.0001)GO TO 233
          L8I(JA)=3.322*ALOG10(LWP(JA))*NEN+EQLV
          GO TO 235
      233 L8I(JA)=FLOAT(JA)/1.E+4
      235 IF(LWPWC(JA).LT.0.00001)GO TO 232
          L8IWC(JA)=3.322*ALOG10(LWPWC(JA))*NEN+EQLV
      232 CONTINUE
          IF(LWP(JA).LT.0.000001)LWP(JA)=FLOAT(JA)/1.E+10
          DO 238 J=1,5
          KNAME2(JA,J)=JDES(J)
      238 CONTINUE
          JSEQ3(JA)=NPRS
          NTTO=NTTO+NPRS
          JARR3(JA)=IDINT(KCC-100000.0*DFLOAT(IDINT(KCC/100000.0))+0.1)
          GO TO 100
      240 CONTINUE
          NTTT=NTTO
          IF(OPT(25).NE.1)GO TO 250
          DO 245 IJ=1,JA
          JSEQ3(IJ)=JSEQ3(IJ)*(FLOAT(NPOP)/FLOAT(NTTO)+1.E-8)
      245 CONTINUE
          NEXP=NEXP*NPOP/NTTO
      NEXPWC=NEXPWC*NPOP/NTTU
      NTTU=NPOP
  250 CONTINUE
      NRUN=NRUN+1
      REWIND 31
C   IF FIRST TIME THROUGH ITERATION SORT IN ORDER OF DAILY NOISE DOSE
C
      IF(NRUN.EQ.1)CALL JOBST1(LSTO,JA,L31)
C
C   NOW CALCULATE EQUIPMENT IMPACT
C   FIRST WE INITIALIZE ARRAYS
C
      DO 997 KKK=1,2
      DO 305 KJ=1,JMAX
      LWPJ(KJ)=0.0
      LWPN(KJ)=0.0
      NPEOP(KJ)=0.0
  305 CONTINUE
      IF(OPT(16).NE.0.AND.OPT(17).NE.0)GO TO 380
      BUM=0.0
      JB=0
      LKDT=0
  310 READ(31,END=360) KCC,(JDES(J),J=1,5),(M(JJ),H(JJ),HS(JJ),JJ=1,10),
     1NPRS
      IF(NPRS.EQ.0)GO TO 310
      IF(M(1).EQ.0)GO TO 310
      IF(OPT(25).EQ.1)NPRS=NPRS*NPOP/NTTT
      JB=JB+1
      IF(LWP(JB).LE.1.00001)GO TO 310
      DO 350 IJ=1,10
      IF(M(IJ).EQ.0)GO TO 310
      IF(M(IJ).EQ.1000)GO TO 350
      KJ=NOM(M(IJ))
      IF(KNAM1(KJ,3).NE.KDATA(3).AND.KJ.NE.0)GO TO 320
      WRITE(6,6002) M(IJ)
      GO TO 350
  320 CONTINUE
      NPEOP(KJ)=NPEOP(KJ)+NPRS
      IF(ALEQ2(KJ).LE.ANTH)GO TO 350
      FIJ=FACN*H(IJ)*2.0**((ALEQ2(KJ)-ANTH)/NEN)*OPT(8)/4.0
      ALP=FIJ*NPRS/LWP(JB)
      IF(KKK.EQ.2)ALP=FIJ*NPRS
      IF(JCHK(KJ).EQ.0)GO TO 325
      KADD=JTC(JCHK(KJ))
      DO 326 J=1,KADD
      IF(LCD1(JCHK(KJ),J) .EQ.1000)GO TO 326
      ALX=ALP*DCD1(JCHK(KJ),J)
      BUM=BUM+ALX
      KF=NOM(LCO1(JCHK(KJ),J))
      NPEOP(KF)=NPEOP(KF)+NPKS
      LWPJ(KF)=LWPJ(KF)+ALX
  326 CONTINUE
      GO TO 350
  325 CONTINUE
      LWPJ(KJ)=LWPJ(KJ)+ALP
  327 CONTINUE
      BUM=BUM+ALP
  350 CONTINUE
      GO TO 310
  360 CONTINUE
C    NORMALIZE PIJ
      DO 370 IJ=1,JMAX
      IF(LWPJ(IJ).GT.0.001)GO TO 365
      LWPJ(IJ)=ALEQ2(IJ)/10000000.0
  365 CONTINUE
      IF(JCHK(IJ).EQ.0)GO TO 366
      LWPJ(IJ)=0.0
      LKOT=LKOT+1
  366 CONTINUE
      IF(BUM.LE.0.0)GO TO 370
      LWPN(IJ)=LWPJ(IJ)/BUM
  370 CONTINUE
      REWIND 31
      IF(NRUN.GT.1)GO TO 380
      KBK=KKK
      JMDZ=JMZ-LKOT
      CALL WRITE2(OPTST,JA,NRUN,LCA,JMAX,IR,1,NPLT,NTOT,JBL,NTIS
     1,KBK,JMDZ)
  380 CONTINUE
  997 CONTINUE
 6002 FORMAT(/12X,27HNO DATA FOR EQUIPMENT CODE ,I4)
      RETURN
      END
      SUBROUTINE WRITE3(IZ,KKI,NTOT,NPLT,JA,JMAX,LCA,NTRIC)
      IMPLICIT INTEGER (O)
      REAL L8I,L8IWC,LWP,LWPWC,LWPJ,LWPWCJ,LWPN,LWPWCN,LIJ,LIJWC,KCC*
     1,JCODE2*8
      COMMON/COSHA/ SWH(10),SLEVWC(10),                 JDES(5),M(10),H(10),
     1HS(10),NEXPWC,   JCODE(5),LWPJ(500),LWPN(500),NEXP,LADO
     7,KDATA(5)
      COMMON/EQ1/ALEQ2(500),STDAM(500),KNAM1(500,5),JARR(500),JSEQ(500)
      COMMON/EQ2/ALEQ3(500),STDM3(500),KNAME2(500,5),JARR3(500),JSEQ3(50
     10)
      COMMON/ITSDE/ITST(50),OPT(30),NTST(50)
      COMMON/NM/NAME(9),JBNJNO,SNAME(50,7),NPL(50),NSIC(50)
      COMMON/NCOM/NOM(10000)
      COMMON/NWC/LWP(500),LWPWC(500),NT90,NW90,NT75,NW75,NTTO,LSTO(500),
     1KSTO(500),L8I(500),L8IWC(500),SUM,SUMWC,LNT90,LNT75,LNW90,LNW75,
     2AL82(500),AL82WC(500),ALVP(500),ALVPWC(500),NUMP(500),JOBC(500),
     3NSTO(500),MSTO(500),NJ(500),JE,ORD(500),JBDES2(50,5),RSUM,RSUMWC
      COMMON/DTE/ND1(50),ND2(50),ND3(50),ND4(50),NPPP(50)
      COMMON/ISICP/ICS(20),IPS(20,50),INU(20)
      COMMON/IDX2/DCD1(150,20),LCD1(150,20),LCODE(3),DEC(3),JCHK(600),
     1JTC(150),JTC2(150),AINC,OY,ANTH,EQLV,NEN,NACC
      IF(ANTH.LE.10.0)ANTH=75.0
C
C     THIS SUBROUTINE WRITES OUT NOISE REDUCTION IMPACT DATA
C
C     FIRSTLY WRITE EQUIPMENT LEQ DATA
C
      JMZ=JMAX-LCA
      NOB=0
      IF(OPT(15).EQ.1)GO TO 1700
      IF(OPT(17).NE.0)GO TO 1700
 1600 WRITE(6,6035) (NAME(J),J=1,9),JBNJNO
      NLN=38
      WRITE(6,6051)
      CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
      WRITE(6,6036)
C     NOW WRITE LIST OF DATA
      NZT=0
      DO 1620 IL=1,45
      NZT=NZT+1
      NOB=NOB+1
      IF(NOB.GT.JMZ )GO TO 1625
      READ(50) ALQ,STQ,NBT
      IF(ALQ.EQ.0.0.OR.JARR(NBT).EQ.1000)GO TO 1619
      RED=ALQ-ALEQ2(NBT)
      WRITE(6,6037) JARR(NBT),(KNAM1(NBT,J),J=1,5),JSEQ(NBT),ALQ,ALEQ2(N
     1BT),RED
       GO TO 1618
 1619 CONTINUE
      NZT=NZT-1
 1618 CONTINUE
      IF(NZT.GE.NLN)GO TO 1600
 1620 CONTINUE
 1625 CONTINUE
      NOB=NOB-1
      IF(OPT(24).EQ.0)GO TO 1700
 1630 WRITE(6,6035) (NAME(J),J=1,9),JBNJNO
      NLN=38
      WRITE(6,6052)
      CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
      WRITE(6,6036)
      NZT=0
 1635 NZT=NZT+1
      NOB=NOB+1
      IF(NOB.GT.JMAX)GO TO 1700
      READ(50) ALQ,STQ,NBT
      IF(ALQ.EQ.0.0.OR.JARR(NBT).EQ.1000)GO TO 1636
      RED=ALQ-ALEQ2(NBT)
      WRITE(6,6037) JARR(NBT),(KNAM1(NBT,J),J=1,5),JSEQ(NBT),ALQ,ALEQ2(N
     1BT),RED
      GO TO 1637
 1636 CONTINUE
      NZT=NZT-1
 1637 CONTINUE
      IF(NZT.GE.NLN)GO TO 1630
      GO TO 1635
 1700 CONTINUE
C    NOW WRITE OUT TOTAL IMPACT DATA
      WRITE(6,6135)      (NAME(J),J=1,9),JBNJNO
      WRITE(6,6043)
      WRITE(6,6038)
      IF(OPT(28).EQ.0)GO TO 1715
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 1715
      WRITE(6,6137) ANTH,EQLV,NEN
      CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
      WRITE(6,6134)NTTO,NTTO,LNT90,NEXP,LNW90,NEXPWC
      GO TO 1718
 1715 CONTINUE
      WRITE(6,6210)
      CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
      WRITE(6,6034) NTTO,NTTO,LNT75,NT75,LNW75,NW75,LNT90,NT90,LNW90,
     1NW90,RSUM,SUM,RSUMWC,SUMWC
 1718 CONTINUE
C
C    NOW WRITE OUT PERSONNEL IMPACT NOISE REDUCTION DATA
C
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      IF(OPT(19).EQ.1)GO TO 1800
      IF(OPT(20).NE.0)GO TO 1800
      NBT=0
      IF(OPT(21).EQ.2)GO TO 1750
 1720 NZT=0
      NLN=38
      WRITE(6,6135)       (NAME(J),J=1,9),JBNJNO
      WRITE(6,6038)
      IF(OPT(28).EQ.0)GO TO 1725
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 1725
      WRITE(6,6137) ANTH,EQLV,NEN
      NLN=34
      GO TO 1724
 1725 CONTINUE
      WRITE(6,6210)
 1724 CONTINUE
      CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
      IF(OPT(28).EQ.0)GO TO 1726
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 1726
      WRITE(6,6140)
      WRITE(6,6141)
      GO TO 1727
 1726 CONTINUE
      WRITE(6,6040)
      WRITE(6,6041)
 1727 CONTINUE
      IF(OPT(28).EQ.1)GO TO 1755
      IF(OPT(28).GE.2.AND.NTRIC.NE.0)GO TO 1755
      DO 1730 IL=1,45
      NZT=NZT+1
      NBT=NBT+1
      IF(NBT.GT.JA)GO TO 1750
      READ(50) AL8,AL8W,AWP,AWC,NOB
      LW=INT(LWP(NOB))
      LC=INT(LWPWC(NOB))
      LAP=INT(AWP)
      LAC=INT(AWC)
      KM=LAP-LW
      KWC=LAC-LC
      WRITE(6,6042) JARR3(NOB       ),(KNAME2(NOB        ,J),J=1,5),
     1JSEQ3(NOB        ),LAP,LAC,LW,LC,KM,KWC
      IF(NZT.GE.NLN)GO TO 1720
 1730 CONTINUE
 1755 CONTINUE
      DO 1735 IL=1,45
      NZT=NZT+1
      NBT=NBT+1
      IF(NBT.GT.JA)GO TO 1750
      READ(50)AL8,AL8W,AWP,AWC,NOB
      AW=LWP(NOB)
      AC=LWPWC(NOB)
      RW=AWP-AW
      RC=AWC-AC
      WRITE(6,6142)JARR3(NOB       ),(KNAME2(NOB       ,J),J=1,5),
     1JSEQ3(NOB       ),AWP,AWC,AW,AC,RW,RC
      IF(NZT.GE.NLN)GO TO 1720
 1735 CONTINUE
 1750 CONTINUE
      IF(OPT(21).EQ.1)GO TO 1790
      NBT=0
 1760 NLN=38
      NZT=0
      WRITE(6,6135)      (NAME(J),J=1,9),JBNJNO
      WRITE(6,6038)
      IF(OPT(28).EQ.0)GO TO 1758
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 1758
      NLN=34
      WRITE(6,6137) ANTH,EQLV,NEW
      GO TO 1759
 1758 CONTINUE
      WRITE(6,6210)
 1759 CONTINUE
      CALL WRITE1(IZ,KKI,NO1,NO2,NTOT,NPLT,NLN)
       WRITE(6,6039)
      WRITE(6,6141)
 1765 CONTINUE
      NZT=NZT+1
      NBT=NBT+1
      IF(NBT.GT.JA)GO TO 1790
      READ(50) AL8,AL8W,AWP,AWPC,NOB
      AKP=AL8-L8I(NOB)
      AKC=AL8W-L8IWC(NOB)
      IF(L8I(NOB).LT.ANTH)AKP=AL8-ANTH
      IF(L8IWC(NOB).LT.ANTH)AKC=AL8W-ANTH
      IF(AKP.LT.0.0)AKP=0.0
      IF(AKC.LT.0.0)AKC=0.0
      IF(AL8.LT.ANTH.AND.AL8W.LT.ANTH)GO TO 1770
      IF(AL8.LT.ANTH)GO TO 1775
      IF(L8I(NOB).LT.ANTH.AND.L8IWC(NOB).LT.ANTH)GO TO 1780
      IF(L8I(NOB).LT.ANTH)GO TO 1785
      WRITE(6,6044) JARR3(NOB       ),(KNAME2(NOB       ,J),J=1,5),
     1JSEQ3(NOB       ),AL8,AL8W,L8I(NOB       ),L8IWC(NOB       ),AKP,AKC
      GO TO 1795
 1770 WRITE(6,6101) JARR3(NOB       ),(KNAME2(NOB       ,J),J=1,5),
     1JSEQ3(NOB),ANTH,ANTH,ANTH,ANTH,AKP,AKC
      GO TO 1795
 1775 WRITE(6,6102) JARR3(NOB        ),(KNAME2(NOB        ,J),J=1,5),
     1JSEQ3(NOB        ),ANTH,AL8W,ANTH,L8IWC(NOB        ),AKP,AKC
      GO TO 1795
 1780 WRITE(6,6103) JARR3(NOB        ),(KNAME2(NOB        ,J),J=1,5),
     1JSEQ3(NOB        ),AL8,AL8W,ANTH,ANTH,AKP,AKC
      GO TO 1795
 1785 WRITE(6,6104) JARR3(NOB        ),(KNAME2(NOB        ,J),J=1,5),
     1JSEQ3(NOB        ),AL8,AL8W,ANTH,L8IWC(NOB        ),AKP,AKC
 1795 CONTINUE
      IF(NZT.GE.NLN)GO TO 1760
      IF(NZT.EQ.45)STOP 23
      GO TO 1765
 1790 CONTINUE
      NBT=0
      IF(OPT(21).EQ.2)GO TO 2750
 2720 NZT=0
      NLN=38
      WRITE(6,6135)     (NAME(J),J=1,9),JBNJNO
      WRITE(6,6138)
      IF(OPT(28).EQ.0)GO TO 2725
      IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 2725
      NLN=34
      WRITE(6,6137) ANTH,EQLV,NEN
      GO TO 2726
 2725 CONTINUE
      WRITE(6,6210)
 2726 CONTINUE
      CALL WRITE1(IZ,KKI,NO1,NO2,NTOT,NPLT,NLN)
      IF(OPT(28).EQ.1)GO TO 2727
      IF(OPT(28).GE.2.AND.NTRIC.NE.0)GO TO 2727
      WRITE(6,6040)
      WRITE(6,6041)
      GO TO 2728
 2727 CONTINUE
      WRITE(6,6140)
      WRITE(6,6141)
 2728 CONTINUE
      IF(OPT(28).EQ.1)GO TO 2755
      IF(OPT(28).GE.2.AND.NTRIC.NE.0)GO TO 2755
      DO 2730 IL=1,45
      NZT=NZT+1
      NBT=NBT+1
      IF(NBT.GT.JE)GO TO 2750
      READ(50) AL8,AL8W,AWP,AWC,NOB
      LW=INT(ALVP(NOB))
      LC=INT(ALVPWC(NOB))
      LAP=INT(AWP)
      LAC=INT(AWC)
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          KM=LAP-LW
          KWC=LAC-LC
          WRITE(6,6042)  JOBC(NOB       ),(KNAME2(NJ(NOB        ),J),J=1,5),
         1 NUMP(NOB        ),LAP,LAC,LW,LC,KM,KWC
          IF(NZT.GE.NLN)GO TO 2720
     2730 CONTINUE
     2755 CONTINUE
          DO 2735 IL=1,45
          NZT=NZT+1
          NBT=NBT+1
          IF(NBT.GT.JE)GO TO 2750
          READ(50) AL8,AL8W,AWP,AWC,NOB
          AW=ALVP(NOB)
          AC=ALVPWC(NOB)
          RW=AWP-AW
          RC=AWC-AC
          WRITE(6,6142)  JOBC(NOB       ),(KNAME2(NJ(NOB        ),J),J=1,5),
         1 NUMP(NOB        ),AWP,AWC,AW,AC,RW,RC
          IF(NZT.GE.NLN)GO TO 2720
     2735 CONTINUE
     2750 CONTINUE
          IF(OPT(21).EQ.1)GO TO 2790
          NBT=0
     2760 NLN=38
          NZT=0
          WRITE(6,6135)      (NAME(J),J=1,9),JBNJNO
          IF(OPT(28).EQ.0)GO TO 2758
          IF(OPT(28).GE.2.AND.NTRIC.EQ.0)GO TO 2758
          NLN=34
          WRITE(6,6137) ANTH,EQLV,NEW
          GO TO 2759
     2758 CONTINUE
          WRITE(6,6210)
     2759 CONTINUE
          WRITE(6,6138)
          CALL WRITE1(IZ,KKI,ND1,ND2,NTOT,NPLT,NLN)
           WRITE(6,6039)
          WRITE(6,6141)
     2765 CONTINUE
          NZT=NZT+1
          NBT=NBT+1
          IF(NBT.GT.JE)GO TO 2790
          READ(50) AL8,AL8W,AWP,AWPC,NOB
          AKP=AL8-AL82(NOB)
          AKC=AL8W-AL82WC(NOB)
          IF(AL82(NOB).LT.ANTH)AKP=AL8-ANTH
          IF(AL82WC(NOB).LT.ANTH)AKC=AL8W-ANTH
          IF(AKP.LT.0.0)AKP=0.0
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      IF(AKC.LT.0.0)AKC=0.0
      IF(AL8.LT.ANTH.AND.AL8W.LT.ANTH)GO TO 2770
      IF(AL8.LT.ANTH)GO TO 2775
      IF(AL82(NOB       ).LT.ANTH.AND.AL82WC(NOB       ).LT.ANTH)GO TO
     12780
      IF(AL82(NOB       ).LT.ANTH)GO TO 2785
      WRITE(6,6044)  JOBC(NOB       ),(KNAME2(NJ(NOB       ),J),J=1,5),
     1 NUMP(NOB       ),AL8,AL8W,AL82(NOB       ),AL82WC(NOB       ),AKP,
     2AKC
      GO TO 2795
 2770 WRITE(6,6101)  JOBC(NOB       ),(KNAME2(NJ(NOB       ),J),J=1,5),
     1NUMP(NOB),ANTH,ANTH,ANTH,ANTH,AKP,AKC
      GO TO 2795
 2775 WRITE(6,6102)  JOBC(NOB       ),(KNAME2(NJ(NOB       ),J),J=1,5),
     1NUMP(NOB       ),ANTH,AL8W,ANTH,AL82WC(NOB),AKP,AKC
      GO TO 2795
 2780 WRITE(6,6103)  JOBC(NOB       ),(KNAME2(NJ(NOB       ),J),J=1,5),
     1NUMP(NOB       ),AL8,AL8W,ANTH,ANTH,AKP,AKC
      GO TO 2795
 2785 WRITE(6,6104)  JOBC(NOB       ),(KNAME2(NJ(NOB       ),J),J=1,5),
     1NUMP(NOB       ),AL8,AL8W,ANTH,AL82WC(NOB       ),AKP,AKC
 2795 CONTINUE
      IF(NZT.GE.NLN)GO TO 2760
      IF(NZT.EQ.45)STOP 23
      GO TO 2765
 2790 CONTINUE
 1800 CONTINUE
 6034 FORMAT(///12X,70H*************************************************
     1*********************, //52X,30HBEFORE CHANGE     AFTER CHANGE//
     212X,22HTOTAL NO. OF PERSONNEL,22X,I6,12X,I6/12X,36HTOTAL NO OF PER
     3S. WITH LEQ>75 (MEAN),      8X,I6,12X,I6/12X,36HTOTAL NO OF PERS.
     4WITH LEQ>75 (W.C.),8X,I6,12X,I6/12X,36HTOTAL NO OF PERS. WITH LEQ>
     590 (MEAN),     8X,I6,12X,I6/12X,36HTOTAL NO OF PERS. WITH LEQ>90 (W
     6.C.),    8X,I6,12X,I6/   12X,32HLEVEL WEIGHTED POPULATION (MEAN),
     611X,F9.1,10X,F9.1/12X,32HLEVEL WEIGHTED POPULATION (W.C.),11X,
     7F9.1,10X,F9.1//
     812X,70H***********************************************************
     9***********, //)
 6035 FORMAT(1H1  //////12X,9A4,17X,12H8bN JOB NO. ,I6///29X,33HEFFECT O
     1F EQUIPMENT NOISE CONTROL/)
 6036 FORMAT(/12X,6HEQUIP.,6X,20H     EQUIPMENT      ,3X,7HNO. OF ,3X,
     114HMEAN LEQ (DBA),3X,10HNOISE RED./12X,6H CODE ,6X,20H    DESCRIPT
     2ION      ,3X,7HSAMPLES,3X,6HBEFORE,2X,6HAFTER ,3X,10H  (DBA)   /)
 6037 FORMAT(13X,I4,7X,5A4,4X,I5,4X,F5.1,3X,F5.1,7X,F4.1)
 6038 FORMAT(/23X,45HEFFECT OF NOISE CONTROL ON PERSONNEL EXPOSURE/)
 6039 FORMAT(/50X,33H----------- SOUND LEVEL -----------)
 6040 FORMAT(/50X,33H--- LEVEL WEIGHTED POPULATION ---)
 6041 FORMAT(12X,4H JOB,2X,20H  JOB DESCRIPTION    ,2X,5HNO.OF, 5X,6HBEFO
     1RE,6X,5HAFTER,9X,6HCHANGE/12X,4HCODE,24X,5HPERS.,2X,4HMEAN,3X,
     14HW.C.,3X,4HMEAN,3X,4HW.C.,3X,4HMEAN,3X,4HW.C./)
 6042 FORMAT(11X,I5,2X,5A4,I6,4I7,1X,I6,1X,I6)
 6043 FORMAT(///)
 6044 FORMAT(11X,I5,2X,5A4,I6,   2(2X,F5.1,2X,F5.1),2X,F5.1,1X,F5.1)
 6051 FORMAT(/22X,50HBACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)/
     1)
 6052 FORMAT(/22X,47HEQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED/)
 6101 FORMAT(11X,I5,2X,5A4,I6,   2X,1H<,F4.1,2X,1H<,F4.1,2X,1H<,F4.1,
     12X,1H<,F4.1,2X,F5.1,1X,F5.1)
 6102 FORMAT(11X,I5,2X,5A4,I6,   2X,1H<,F4.1,2X,F5.1,2X,1H<,F4.1,2X,
     1F5.1,2X,F5.1,1X,F5.1)
 6103 FORMAT(11X,I5,2X,5A4,I6,   2X,F5.1,2X,F5.1,2X,1H<,F4.1,2X,1H<,F4.1
     1,2X,F5.1,1X,F5.1)
 6104 FORMAT(11X,I5,2X,5A4,I6,   2X,F5.1,2X,F5.1,2X,1H<,F4.1,2X,F5.1,
     12X,F5.1,1X,F5.1)
 6134 FORMAT(///12X,70H**************************************************
     1********************//51X,30HBEFORE CHANGE      AFTER CHANGE//
     215X,34HTOTAL NUMBER OF PERSONNEL         = ,6X,I6,11X,I6/
     315X,34HTOTAL NUMBER OVEREXPOSED (MEAN) = ,6X,I6,11X,I6/
     415X,34HTOTAL NUMBER OVEREXPOSED (W.C.) = ,6X,I6,11X,I6//
     512X,70H**********************************************************
     6************)
 6135 FORMAT(1H1//////12X,9A4,15X,12HBBN JOB NO. ,I6/)
 6136 FORMAT(28X,35HPERSONNEL NOISE EXPOSURE AND IMPACT/)
 6137 FORMAT(30X,24HTHRESHOLD LEVEL          =,F5.1,4H DBA/
     1        30X,25H8-HR PERMISSIBLE LEVEL = ,F4.1,4H DBA/
     2        30X,25HEXCHANGE RATE           = ,I2,4H DBA//)
 6138 FORMAT(/19X,54HEFFECT OF NOISE CONTROL ON PERSONNEL EXPOSURE AVERA
     1GES/)
 6140 FORMAT(/50X,33H--------- DAILY NOISE DOSE -------)
 6141 FORMAT(12X,4H JOB,2X,20H  JOB DESCRIPTION    ,2X,5HNO.OF, 5X,6HBEFO
     1RE,8X,5HAFTER,8X,6HCHANGE/12X,4HCODE,24X,5HPERS.,2X,4HMEAN,3X,
     14HW.C.,3X,4HMEAN,3X,4HW.C.,3X,4HMEAN,2X,4HW.C./)
 6142 FORMAT(11X,I5,2X,5A4,I6,   2(2X,F5.2,1X,F6.2),2X,F5.2,1X,F5.2)
 6306 FORMAT(23X,44HPERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES/)
 6210 FORMAT(40X,12HEPA CRITERIA/)
      RETURN
      END
```

APPENDIX C

Sawmill Industry Input Data

In this appendix the computer model input data for each of the nine plants are listed. Also included are the results of the data averaging process for both the equipment noise data and personnel work assignments.

Table C-1 consists of a list of jobs or a list of personnel categories, one line for each category. Table C-2 contains a list of equipment, one line for each equipment type. The contents of these tables are directly related to input data, in particular card groups five and six discussed in Appendix B These first two tables are applicable to all of the nine plants.

For each of the nine plants we have six additional tables. The first table of each group of six is the equipment noise data for the particular plant, listed as appearing in the model input data. The first column contains a four digit code unique to the equipment type and listed in table C-2. The second column is a brief description of the equipment type and the third column is the measured noise level, usually at the operator location.

The second table in each group of tables (one group of tables for each plant)contains noise level data for background types. The first three columns are similar to the corresponding columns in the previous table. Subsequent columns indicate how much certain equipment types contribute to the noise level. This is explained more fully in Appendix B, section B.2.

The third table in each group of tables contains results derived from averaging data for the same equipment or background type. The third column is the number of samples used in the average, the fourth column contains the mean value of the noise level data and the fifth column contains the standard deviation.

The fourth table contains the noise level data averages for the general equipment classifications of table 5-7. These data are derived from the data for individual equipment types listed in the previous table. If no data exist for a general classification, it is omitted from the table. Background levels are excluded from the noise data averages for the general classifications.

The fifth table is a list of the input personnel work assignment data for the particular plant. The format is similar to that described in Appendix B. Columns 5, 7 and 9 indicate the % of time spent, by the personnel in the category described in columns one and two, on particular tasks described by the preceding four digit equipment or background code. Up to four lines of data in columns 4 to 9 may exist for each personnel category. Column three contains the number of personnel in each job category.

The sixth table is derived from the data in the fifth table described above. If more than one item of data exists for the same personnel category, the data are either separated into separate subcategories or combined into a single subcategory. If the data involve the same equipment or background types but different assignment times then they are averaged into one sub category. If the data involve different equipment or background types, they are separated into different personnel subcategories. To allow this to occur,

111<

an extra two digits are added to the right hand side of each three digit job code, allowing up to 99 subcategories for each personnel category. For data combined into the same subcategory a mean and standard deviation for the assignment time to each task (background or equipment type) is calculated. The standard deviation number is used in the worst case estimate described in Section 5 of this report.

The third, fourth and sixth tables described above are also generated for the average results for the entire nine plants and appear at the end of this appendix.

Table C-1 (Cont'd) LIST OF JOBS

JOB CODE	JOB DESCRIPTION
24101	SAWMILL SUPERVISOR
24104	PLANER SUPERVISOR
24107	POND SORTER
24108	LOG SORTER
24111	LOG CARRIER OPER
24114	DEBARKER OPERATOR
24117	DECK SCALER
24120	CUT-OFF SAW OPERATOR
24123	SAWYER
24127	TAIL SAWYER
24128	QUADSAW TAIL SAWYER
24131	GANG SAW OPERATOR
24133	SLAB BOARD PULLER
24134	EDGER OPERATOR
24137	CHIPPER OPERATOR
24138	HOG OPERATOR
24140	RESAW OPERATOR
24143	UNSCRAMBLE OPERATOR
24144	LUMBER DIVERTER
24145	GREEN CHAIN OPERATOR
24148	TRIMMER OPERATOR
24151	GREEN CHAIN PULLER
24154	STACKER-GREEN
24155	STICKERMAN-GREEN
24156	UNIPAC OPERATOR
24159	TRANSFER OPERATOR
24160	KILN OPERATOR
24161	UNSTACKER-DRY
24162	UNSTACKER PULLER
24163	GRADER/SORTING CHAIN
24167	PLANER OPERATOR
24168	PLANER SET-UP MAN
24173	GRADER/PLANER MILL
24176	DRY CHAIN PULLER
24179	BANDER OPERATOR
24181	CHECKERS
24182	TALLYMEN
24185	RIPSAW OPERATOR
24186	RIPSAW OFFBEARER
24191	SPECIALTY RESAW OFFB

Table C-1. LIST OF JOBS

JOB CODE	JOB DESCRIPTION
24190	SPECIALTY RESAW OPER
24196	MOULDER FEEDER
24197	MOULDER OFFBEARER
24201	LUMBER CARRIER OPER
24202	FORKLIFT OPERATOR
24207	RAILCAR LOADER
24211	MILLWRIGHT/GENERAL
24212	MILLWRIGHT/SAWMILL
24213	MILLWRIGHT/PLANER
24216	SHOPMAN/GENERAL
24217	WELDER
24219	MACHINISTS
24223	MECHANICS
24226	ELECTRICIANS
24235	CARPENTERS
24238	PIPE-FITTERS
24244	FILERS
24245	OILER
24248	POWERHOUSE OPERATOR
24261	CLEAN-UP MAN/REGULAR
24262	CLEAN-UP MAN/DOWN TM
24265	LABORER
24266	HELPER

Table C-2 (Cont'd) LIST OF EQUIPMENT

EQUIP. CODE	GENERIC NAME	TYPE	SIZE/CONDITION
1644	RESAW-LARGE	GENERAL	GENERAL
1645	BACK/RESAW	RESAW	
1646	RESAW-LARGE	MANUAL/PINCH ROLL	IDLE/ENCLOSED
1647	RESAW-LARGE	MANUAL/PINCH ROLL	OPERATING/ENCL
1648	RESAW-LARGE	MANUAL/PINCH ROLL	IDLE
1649	RESAW-LARGE	MANUAL/PINCH ROLL	OPERATING
1650	RESAW-LARGE	MANUAL/LINE BAR	IDLE/ENCLOSED
1651	RESAW-LARGE	MANUAL/LINE BAR	OPERATING/ENCL
1652	RESAW-LARGE	MANUAL/LINE BAR	IDLE
1653	RESAW-LARGE	MANUAL/LINE BAR	OPERATING
1654	RESAW-LARGE	DOUBLE/AUTOMATIC	OPERATING/ENCL
1655	RESAW-LARGE	DOUBLE/AUTOMATIC	IDLE/ENCLOSED
1656	RESAW-LARGE	AUTO-DOUBLE	OPERATING
1657	RESAW-LARGE	AUTO-DOUBLE	IDLE
1658	RESAW-LARGE	AUTO-SINGLE/PINCH	OPERATING/ENCL
1659	RESAW-LARGE	AUTO-SINGLE/PINCH	IDLE/ENCLOSED
1660	RESAW-LARGE	AUTO-SINGLE/PINCH	OPERATING
1661	RESAW-LARGE	AUTO-SINGLE/PINCH	IDLE
1664	TRIMMER	GENERAL	GENERAL
1665	BACK/TRIMMER	TRIMMER	SAWMILL
1666	TRIMMER	MANUAL	IDLE
1667	TRIMMER	MANUAL	OPERATING
1669	TRIMMER	AUTOMATIC	IDLE/ENCLOSED
1670	TRIMMER	AUTOMATIC	OPERATING/ENCL
1671	TRIMMER	AUTOMATIC	IDLE
1672	TRIMMER	AUTOMATIC	OPERATING
1674	TRIMMER	AUTO SPECIES MARK	OPERATING
1679	GREEN CHAIN CONVY	GENERAL	GENERAL
1680	BACK/GREEN CHAIN	GREEN CHAIN	
1681	GREEN CHAIN CONVY	MANUAL	PULLER
1682	GREEN CHAIN CONVY	AUTOMATIC	PULLER
1683	GREEN CHAIN CONVY	AUTOMATIC	LUMBER DIVERTER
1685	KILN	GENERAL	GENERAL
1686	BACK/KILN&CNTL RM	KILN CONTROL ROOM	
1687	KILN	AUTOMATIC	OPERATING
1689	BACK/KILN CHAIN	KILN CHAIN CONVEY	
1690	KILN CHAIN CONVYR	GREEN	STACKER
1691	KILN CHAIN CONVYR	GREEN	STICKERMAN
1692	KILN CHAIN CONVYR	DRY	UNSTACKER
1693	KILN CHAIN CONVYR	DRY	PULLER

Table C-2. LIST OF EQUIPMENT

EQUIP. CODE	GENERIC NAME	TYPE	SIZE/CONDITION
1000	BACKGROUND	NOISE BELOW 75DBA	GENERAL
1513	WHEEL GRINDER	MANUAL/ELEC	
1600	DEBARKER	GENERAL	GENERAL
1601	BACK/DEBARKER	DEBARKER	
1602	DEBARKER	RING	IDLE/ENCLOSED
1603	DEBARKER	RING	OPERATING/ENCL
1604	DEBARKER	RING	IDLE
1605	DEBARKER	RING	OPERATING
1606	DEBARKER	ROSSING	IDLE/ENCLOSED
1607	DEBARKER	ROSSING	OPERATING/ENCL
1608	DEBARKER	ROSSING	IDLE
1609	DEBARKER	ROSSING	OPERATING
1610	CUT-OFF SAW	GENERAL	GENERAL
1611	BACK/CUT-OFF	CUT-OFF SAW	
1612	CUT-OFF SAW	CIRCULAR	IDLE/ENCLOSED
1613	CUT-OFF SAW	CIRCULAR	OPERATING/ENCL
1614	CUT-OFF SAW	CIRCULAR	IDLE
1615	CUT-OFF SAW	CIRCULAR	OPERATING
1616	CUT-OFF SAW	CHAIN	IDLE/ENCLOSED
1617	CUT-OFF SAW	CHAIN	OPERATING/ENCL
1618	CUT-OFF SAW	CHAIN	IDLE
1619	CUT-OFF SAW	CHAIN	OPERATING
1620	HEADRIG	GENERAL	GENERAL
1621	BACK/HEADRIG	HEADRIG	
1622	HEADRIG	BANDSAW/SAWYER	IDLE/ENCLOSED
1623	HEADRIG	BANDSAW/SAWYER	OPERATING/ENCL
1624	HEADRIG	BANDSAW/SAWYER	IDLE
1625	HEADRIG	BANDSAW/SAWYER	OPERATING
1626	HEADRIG	BANDSAW/TAIL	IDLE
1627	HEADRIG	BANDSAW/TAIL	OPERATING
1629	EDGER	GENERAL	GENERAL
1630	BACK/EDGER	EDGER	
1631	EDGER	MANUAL	GENERAL/ENCLOSED
1632	EDGER	MANUAL	IDLE/ENCLOSED
1633	EDGER	MANUAL	OPERATING/ENCL
1635	EDGER	MANUAL	IDLE
1636	EDGER	MANUAL	OPERATING
1637	EDGER	AUTOMATIC	IDLE
1638	EDGER	AUTOMATIC	OPERATING
1639	EDGER	AUTOMATIC	OUTFEED

Table C-2 (Cont'd) LIST OF EQUIPMENT

EQUIP. CODE	GENERIC NAME	TYPE	SIZE/CONDITION
1694	KILN CHAIN CONVYR	DRY	STACKER
1695	KILN CHAIN CONVYR	DRY CHAIN	TALLYMAN
1696	KILN CHAIN CONVYR	DRY CHAIN	SORTING GRADER
1699	PLANER	GENERAL	GENERAL
1700	BACK/PLANER	PLANER	GRADER AREA
1701	PLANER	3FT	IDLE
1702	PLANER	3FT	OPERATING
1703	PLANER	MANUAL	IDLE
1704	PLANER	MANUAL	OPERATING
1710	PLANER/ENCL	AUTOMATIC/INFEED	IDLE
1711	PLANER/ENCL	AUTOMATIC/INFEED	OPERATING
1712	PLANER	AUTOMATIC/INFEED	IDLE
1713	PLANER	AUTOMATIC/INFEED	OPERATING
1715	PLANER/ENCL	AUTOMATIC/GRADERS	IDLE
1716	PLANER/ENCL	AUTOMATIC/GRADERS	OPERATING
1717	PLANER	AUTOMATIC/GRADERS	IDLE
1718	PLANER	AUTOMATIC/GRADERS	OPERATING
1724	MOULDER	GENERAL	GENERAL
1725	BACK/MOULDER	MOULDER	
1726	MOULDER/ENCL	AUTO/INFEED/INFD	IDLE
1727	MOULDER/ENCL	AUTO/INFEED/INFD	OPERATING
1728	MOULDER	AUTO/INFEED/INFD	IDLE
1729	MOULDER	AUTO/INFEED/INFD	OPERATING
1730	MOULDER/ENCL	AUTO/INFEED/OUTFD	IDLE
1731	MOULDER/ENCL	AUTO/INFEED/OUTFD	OPERATING
1732	MOULDER	AUTO/INFEED/OUTFD	IDLE
1733	MOULDER	AUTO/INFEED/OUTFD	OPERATING
1734	MOULDER	3FT	IDLE
1735	MOULDER	3FT	OPERATING
1739	DRY CHAIN CONVEYR	GENERAL	GENERAL
1740	BACK/DRY CHAIN	DRY CHAIN	
1741	DRY CHAIN CONVEYR	MANUAL	PULLER
1742	DRY CHAIN CONVEYR	AUTOMATIC	PULLER
1747	RAILCAR LOADER	GENERAL	GENERAL
1748	BACK/RAILCAR LOAD		
1749	STACK BANDER	GENERAL	GENERAL
1750	BACK/STACK BANDER	BANDING MACHINE	
1751	STACK BANDER	GENERAL	IDLE
1752	STACK BANDER	GENERAL	OPERATING
1759	RESAW-SPECIALTY	GENERAL	GENERAL

Table C-2 (Cont'd) LIST OF EQUIPMENT

EQUIP. CODE	GENERIC NAME	TYPE	SIZE/CONDITION
1760	BACK/SPEC RESAW	SPECIALTY RESAW	PLANER MILL
1761	RESAW-SPEC/ENCL	SINGLE BAND/INFD	IDLE
1762	RESAW-SPEC/ENCL	SINGLE BAND/INFD	OPERATING
1763	RESAW-SPECIALTY	SINGLE BAND/INFD	IDLE
1764	RESAW-SPECIALTY	SINGLE BAND/INFD	OPERATING
1765	RESAW-SPEC/ENCL	SINGLE BAND/OUTFD	IDLE
1766	RESAW-SPEC/ENCL	SINGLE BAND/OUTFD	OPERATING
1767	RESAW-SPECIALTY	SINGLE BAND/OUTFD	IDLE
1768	RESAW-SPECIALTY	SINGLE BAND/OUTFD	OPERATING
1775	CONVEYOR	GENERAL	GENERAL
1777	BACK/CONVEYOR/GEN		
1779	CHIPPER	GENERAL	GENERAL
1780	BACK/CHIPPER	CHIPPER	
1781	CHIPPER/ENCL	INFEED	IDLE
1782	CHIPPER/ENCL	INFEED	OPERATING
1783	CHIPPER	INFEED	IDLE
1784	CHIPPER	INFEED	OPERATING
1785	HOG	GENERAL	GENERAL
1786	BACK/HOG		
1787	HOG/ENCL	INFEED	IDLE
1788	HOG/ENCL	INFEED	OPERATING
1789	HOG	INFEED	IDLE
1790	HOG	INFEED	OPERATING
1793	BACK/POWERHOUSE	POWERHOUSE	
1794	POWERHOUSE	BOILERS	GENERAL
1796	POWERHOUSE	GENERATORS	GENERAL
1798	SAWMILL OFFICE	FOREMAN/SUPERVISR	GENERAL
1799	BACK/OFFICE/SAWML	SAWMILL OFFICE	
1800	FORKLIFT	GENERAL	GENERAL
1801	BACK/FORKLIFT		
1802	FORKLIFT	ENCLOSED	GENERAL
1808	LOG CARRIER	956 CARRIER	GENERAL
1809	BACK/LOG CARRIER	956 CARRIER	
1810	LUMBER CARRIER	STRADDLE	GENERAL
1811	BACK/LUMBER CARRY	STRADDLE CARRIER	
1814	BACK/TRANSFER RM	TRANSFER ROOM	
1815	TRANSFER CARRIER	RAIL	GENERAL
1816	TRANSFER CARRIER	RAIL	IDLE
1819	QUADSAW	GENERAL	GENERAL
1820	BACK/QUAD SAW	QUAD SAW	

Table C-2 (Cont'd) LIST OF EQUIPMENT

EQUIP. CODE	GENERIC NAME	TYPE	SIZE/CONDITION
1821	QUADSAW	AUTO/OPERATOR	IDLE/ENCLOSED
1822	QUADSAW	AUTO/OPERATOR	OPERATING/ENCL
1823	QUADSAW	AUTO/TAIL	IDLE
1824	QUADSAW	AUTO/TAIL	OPERATING
1829	BACK/GANG SAW	GANG SAW	
1830	GANG SAW	AUTO/INFEED/OPER	IDLE/ENCLOSED
1831	GANG SAW	AUTO/INFEED/OPER	OPERATING/ENCL
1848	RIPSAW-SPECIALTY	GENERAL	GENERAL
1849	BACK/SPEC RIPSAW	RIPSAW	
1850	RIPSAW-SPECIALTY	MANUAL/INFEED	IDLE
1851	RIPSAW-SPECIALTY	MANUAL/INFEED	OPERATING
1852	RIPSAW-SPECIALTY	MANUAL/OFFBEARER	IDLE
1853	RIPSAW-SPECIALTY	MANUAL/OFFBEARER	OPERATING
1868	STORAGE	GENERAL	GENERAL
1869	BACK/STORAGE	SURFACE STORAGE	
1870	BASEMENT	GENERAL	GENERAL
1871	BACK/BASEMENT	BASEMENT	
1872	MACHINE SHOP	GENERAL	GENERAL
1873	BACK/MACHINE SHOP	MACHINE SHOP	
1874	CARPENTRY SHOP	GENERAL	GENERAL
1875	BACK/CARPNTR SHOP	CARPENTER SHOP	
1876	ELECTRIC SHOP	GENERAL	GENERAL
1877	BACK/ELECT SHOP	ELECTRIC SHOP	
1878	PIPE SHOP	GENERAL	GENERAL
1879	BACK/PIPE SHOP	PIPE SHOP	
1880	FILEROOM	GENERAL	GENERAL
1881	BACK/FILEROOM	FILEROOM	
1882	MECHANIC SHOP/GAR	GENERAL	GENERAL
1883	BACK/MECHANIC SHP	MECHANIC SHOP	GARAGE

PLANT NO. 1

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ENVIRONMENTAL PROTECTION AGENCY                                    GEN JOB NO.   9635

                         INPUT EQUIPMENT DATA

SIC CODE:   242                         PLANT NO:  1                      DATE: 1983

EQUIP.          GENERIC NAME                    LEQ
 CODE                                           DBA

 1810           LUMBER CARRIER                  84.0
 1810           LUMBER CARRIER                  86.0
 1810           LUMBER CARRIER                  86.0
 1808           LOG CARRIER                     90.0
 1802           FORKLIFT                        80.0
 1798           SAWMILL OFFICE                  70.0
 1796           POWERHOUSE                      82.0
 1794           POWERHOUSE                      54.0
 1789           HOG                             92.0
 1784           CHIPPER                        100.0
 1784           CHIPPER                        100.0
 1783           CHIPPER                         90.0
 1783           CHIPPER                         92.0
 1776           CONVEYOR                        88.0
 1766           RESAW-SPEC/ENCL                 59.0
 1766           RESAW-SPEC/ENCL                 91.0
 1764           RESAW-SPECIALTY                 89.0
 1762           RESAW-SPEC/ENCL                 90.0
 1762           RESAW-SPEC/ENCL                 86.0
 1752           STACK BANDER                    82.0
 1751           STACK BANDER                    76.0
 1747           RAILCAR LOADER                  76.0
 1747           RAILCAR LOADER                  77.0
 1741           DRY CHAIN CONVEYR               56.0
 1741           DRY CHAIN CONVEYR               84.0
 1741           DRY CHAIN CONVEYR               80.0
 1741           DRY CHAIN CONVEYR               50.0
 1735           MOULDER                        105.0
 1731           MOULDER/ENCL                    89.0
 1727           MOULDER/ENCL                    88.0
 1726           MOULDER/ENCL                    78.0
 1716           PLANER/ENCL                     86.0
 1716           PLANER/ENCL                     94.0
 1711           PLANER/ENCL                     91.0
 1711           PLANER/ENCL                     95.0
 1702           PLANER                         110.0
 1702           PLANER                         108.0
 1702           PLANER                         110.0
 1694           KILN CHAIN CONVYR               82.0
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ENVIRONMENTAL PROTECTION AGENCY                                   SBN JOB NO.   903

                      INPUT EQUIPMENT DATA

SIC CODE:   242                        PLANT NO:  1                      DATE: 1983

EQUIP.          GENERIC NAME                  LEQ
 CODE                                         DBA

 1693           KILN CHAIN CONVYR             72.0
 1692           KILN CHAIN CONVYR             68.0
 1691           KILN CHAIN CONVYR             66.0
 1690           KILN CHAIN CONVYR             66.0
 1682           GREEN CHAIN CONVY             65.0
 1682           GREEN CHAIN CONVY             63.0
 1674           TRIMMER                       95.0
 1672           TRIMMER                       91.0
 1672           TRIMMER                       56.0
 1672           TRIMMER                       66.0
 1670           TRIMMER                       61.0
 1670           TRIMMER                       63.0
 1669           TRIMMER                       71.0
 1647           RESAW-LARGE                   93.0
 1646           RESAW-LARGE                   56.0
 1636           EDGER                        100.0
 1636           EDGER                         99.0
 1635           EDGER                         96.0
 1635           EDGER                         92.0
 1627           HEADRIG                       90.0
 1626           HEADRIG                       96.0
 1625           HEADRIG                       66.0
 1622           HEADRIG                       63.0
 1613           CUT-OFF SAW                   99.0
 1613           CUT-OFF SAW                  102.0
 1612           CUT-OFF SAW                   67.0
 1607           DEBARKER                      72.0
 1606           DEBARKER                      65.0
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ENVIRONMENTAL PROTECTION AGENCY DBN JOB NO. 9655

INPUT BACKGROUND DATA

SIC CODE: 242 PLANT NO: 1 DATE: 1980

BACK. CODE	GENERAL NAME	LEQ DBA	EQUIPMENT CONTRIBUTION TO BACKGROUND CODE	CONTR.	CODE	CONTR.	CODE	CONTR.
1877	BACK/ELECT SHOP	75.0	1000	1.00	0	0.0	0	0.0
1873	BACK/MACHINE SHOP	65.0	1000	1.00	0	0.0	0	0.0
1871	BACK/BASEMENT	84.0	1636	0.40	1623	0.60	0	0.0
1869	BACK/STORAGE	65.0	1000	1.00	0	0.0	0	0.0
1780	BACK/CHIPPER	90.0	1784	0.90	1779	0.10	0	0.0
1760	BACK/SPEC RESAW	92.0	1762	0.50	1766	0.50	0	0.0
1740	BACK/DRY CHAIN	80.0	1741	0.10	1674	0.70	1694	0.20
1725	BACK/MOULDER	92.0	1735	0.80	1727	0.10	1731	0.10
1700	BACK/PLANER	94.0	1702	0.80	1711	0.10	1716	0.10
1689	BACK/KILN CHAIN	80.0	1690	0.40	1691	0.30	1682	0.30
1680	BACK/GREEN CHAIN	81.0	1682	0.60	1690	0.30	1691	0.10
1665	BACK/TRIMMER	82.0	1670	0.80	1682	0.20	0	0.0
1665	BACK/TRIMMER	90.0	1647	0.20	1672	0.80	0	0.0
1630	BACK/EDGER	92.0	1636	0.60	1623	0.40	0	0.0
1621	BACK/HEADRIG	65.0	1783	0.20	1623	0.80	0	0.0
1621	BACK/HEADRIG	95.0	1783	0.30	1623	0.50	1612	0.20

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO.   9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242   PLANT NO. = 1   NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	3	109.3	1.15
1735	MOULDER	1	105.0	0.0
1784	CHIPPER	2	103.0	4.24
1613	CUT-OFF SAW	2	100.5	2.12
1636	EDGER	2	99.5	0.71
1626	HEADRIG	1	98.0	0.0
1674	TRIMMER	1	95.0	0.0
1700	BACK/PLANER	1	94.0	0.0
1647	RESAW-LARGE	1	93.0	0.0
1711	PLANER/ENCL	2	93.0	2.83
1630	BACK/EDGER	1	92.0	0.0
1725	BACK/MOULDER	1	92.0	0.0
1760	BACK/SPEC RESAW	1	92.0	0.0
1789	HOG	1	92.0	0.0
1635	EDGER	2	91.0	1.41
1716	PLANER/ENCL	2	91.0	4[illegible]
1783	CHIPPER	2	91.0	1.41
1621	BACK/HEADRIG	2	90.0	7.07
1627	HEADRIG	1	90.0	0.0
1766	RESAW-SPEC/ENCL	2	90.0	1.41
1780	BACK/CHIPPER	1	90.0	0.0
1731	MOULDER/ENCL	1	89.0	0.0
1764	RESAW-SPECIALTY	1	89.0	0.0
1672	TRIMMER	3	88.3	2.52
1646	RESAW-LARGE	1	88.0	0.0
1692	KILN CHAIN CONVYR	1	88.0	0.0
1727	MOULDER/ENCL	1	88.0	0.0
1762	RESAW-SPEC/ENCL	2	88.0	2.83
1612	CUT-OFF SAW	1	87.0	0.0
1623	HEADRIG	1	86.0	0.0
1665	BACK/TRIMMER	2	86.0	5.66
1690	KILN CHAIN CONVYR	1	86.0	0.0
1691	KILN CHAIN CONVYR	1	86.0	0.0
1682	GREEN CHAIN CONVY	2	84.0	1.41
1794	POWERHOUSE	1	84.0	0.0
1871	BACK/BASEMENT	1	84.0	0.0
1788	BACK. ONLY CONTR.	0	84.0	7.07
1622	HEADRIG	1	83.0	0.0
1741	DRY CHAIN CONVEYR	4	82.5	3.00
1670	TRIMMER	2	82.0	1.41

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1694	KILN CHAIN CONVYR	1	82.0	0.0
1752	STACK BANDER	1	82.0	0.0
1796	POWERHOUSE	1	82.0	0.0
1680	BACK/GREEN CHAIN	1	81.0	0.0
1689	BACK/KILN CHAIN	1	80.0	0.0
1740	BACK/DRY CHAIN	1	80.0	0.0
1802	FORKLIFT	1	80.0	0.0
1726	MOULDER/ENCL	1	78.0	0.0
1751	STACK BANDER	1	76.0	0.0
1877	BACK/ELECT SHOP	1	75.0	0.0
1607	DEBARKER	1	72.0	0.0
1693	KILN CHAIN CONVYR	1	72.0	0.0
1669	TRIMMER	1	71.0	0.0
1606	DEBARKER	1	65.0	0.0
1869	BACK/STORAGE	1	65.0	0.0
1873	BACK/MACHINE SHOP	1	65.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1699	PLANER	7	99.4	2.68
1779	CHIPPER	4	97.0	4.47
1610	CUT-OFF	3	96.0	2.12
1629	EDGER	4	95.3	1.12
1785	HOG	1	92.0	7.07
1644	RESAW/LARGE	2	90.5	0.0
1808	LOG CARRIER	1	90.0	0.0
1724	MOULDER	4	90.0	0.0
1620	HEADRIG	4	89.3	0.0
1759	RESAW/SPECIALTY	5	89.0	2.24
1776	CONVEYOR/GEN	1	88.0	0.0
1810	LUMBER CARRIER	3	86.0	2.00
1664	TRIMMER	7	85.0	2.21
1679	GREEN CHAIN	2	84.0	1.41
1792	POWERHOUSE	2	83.0	0.0
1688	KILN CHAIN	5	82.8	0.0
1739	DRY CHAIN	4	82.5	3[illegible]
1800	FORKLIFT	1	80.0	0.0
1749	STACK BANDER	2	79.0	0.0
1747	RAIL CAR LOAD	2	76.5	0.71
1798	SAWMILL OFFICE	1	70.0	0.0
1600	DEBARKER	2	68.5	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242 PLANT NO: 1 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	TIME	CODE	TIME	CODE	TIME
262	CLEAN-UP MAN/DOWN TM	3	1776	100.0	0	0.0	0	0.0
261	CLEAN-UP MAN/REGULAR	2	1784	20.0	1783	20.0	1776	60.0
248	POWERHOUSE OPERATOR	12	1794	50.0	1796	50.0	0	0.0
244	FILERS	6	1000	100.0	0	0.0	0	0.0
238	PIPE-FITTERS	2	1000	50.0	1776	15.0	1621	15.0
			1630	10.0	1700	10.0	0	0.0
233	CARPENTERS	4	1000	50.0	1776	15.0	1621	15.0
			1630	10.0	1700	10.0	0	0.0
228	ELECTRICIANS	5	1677	25.0	1776	50.0	1621	10.0
			1630	5.0	1700	10.0	0	0.0
223	MECHANICS	3	1000	100.0	0	0.0	0	0.0
219	MACHINISTS	3	1000	100.0	0	0.0	0	0.0
213	MILLWRIGHT/PLANER	3	1000	50.0	1702	10.0	1621	10.0
			1740	30.0	0	0.0	0	0.0
211	MILLWRIGHT/GENERAL	4	1621	85.0	1000	15.0	0	0.0
207	RAILCAR LOADER	9	1747	100.0	0	0.0	0	0.0
202	FORKLIFT OPERATOR	11	1600	100.0	0	0.0	0	0.0
201	LUMBER CARRIER OPER	6	1610	100.0	0	0.0	0	0.0
197	MOULDER OFFBEARER	2	1731	100.0	0	0.0	0	0.0
196	MOULDER FEEDER	2	1727	80.0	1726	20.0	0	0.0
191	SPECIALTY RESAW OFFB	2	1766	100.0	0	0.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY BEN JOB NO. 9655

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242 PLANT NO: 1 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
190	SPECIALTY RESAW OPER	2	1762	100.0	0	0.0	0	0.0
181	CHECKERS	6	1740	100.0	0	0.0	0	0.0
179	BANDER OPERATOR	3	1751	50.0	1752	50.0	0	0.0
176	DRY CHAIN PULLER	20	1741	100.0	0	0.0	0	0.0
173	GRADER/PLANER MILL	15	1716	70.0	1700	30.0	0	0.0
168	PLANER SET-UP MAN	2	1702	12.0	1711	44.0	1716	44.0
167	PLANER OPERATOR	8	1711	70.0	1700	30.0	0	0.0
162	UNSTACKER PULLER	2	1693	100.0	0	0.0	0	0.0
161	UNSTACKER-DRY	2	1692	100.0	0	0.0	0	0.0
160	KILN OPERATOR	3	1600	100.0	0	0.0	0	0.0
156	UNIPAC OPERATOR	2	1694	100.0	0	0.0	0	0.0
155	STICKERMAN-GREEN	2	1691	100.0	0	0.0	0	0.0
154	STACKER-GREEN	4	1690	100.0	0	0.0	0	0.0
151	GREEN CHAIN PULLER	2	1682	100.0	0	0.0	0	0.0
148	TRIMMER OPERATOR	4	1670	50.0	1672	50.0	0	0.0
148	TRIMMER OPERATOR	4	1674	50.0	1670	50.0	0	0.0
145	GREEN CHAIN OPERATOR	4	1682	100.0	0	0.0	0	0.0
140	RESAW OPERATOR	2	1646	35.0	1647	65.0	0	0.0
137	CHIPPER OPERATOR	2	1784	60.0	1783	10.0	1621	30.0

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ENVIRONMENTAL PROTECTION AGENCY
                                                              GBN JOB NO.   9635

                         INPUT PERSONNEL WORK ASSIGNMENTS
SIC CODE:  242                   PLANT NO:  1                     DATE: 1980
 JOB    JOB DESCRIPTION             NO OF     TIME SPENT USING EQUIPMENT CODE
CODE                                PERS.  CODE   TIME   CODE   TIME   CODE   TIME
 134    EDGER OPERATOR                 4   1635   50.0   1636   50.0      0    0.0
 127    TAIL SAWYER                    4   1626   20.0   1627   80.0      0    0.0
 123    SAWYER                         4   1622   20.0   1623   80.0      0    0.0
 117    DECK SCALER                    2   1613    5.0   1621   95.0      0    0.0
 114    DEBARKER OPERATOR              2   1606   40.0   1607   60.0      0    0.0
 111    LOG CARRIER OPER               1   1608   50.0   1000   50.0      0    0.0
 108    LOG SORTER                     2   1000  100.0      0    0.0      0    0.0
 107    POND SORTER                    4   1000  100.0      0    0.0      0    0.0
 104    PLANER SUPERVISOR              4   1000   50.0   1700   50.0      0    0.0
 101    SAWMILL SUPERVISOR             3   1798   50.0   1776   20.0   1621   15.0
                                           1630   15.0      0    0.0      0    0.0
```

ENVIRONMENTAL PROTECTION AGENCY

BCN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26200	CLEAN-UP MAN/DOWN TM	3	1776	8.0	0.0
26100	CLEAN-UP MAN/REGULAR	2	1784	1.6	0.0
			1783	1.6	0.0
			1776	4.8	0.0
24800	POWERHOUSE OPERATOR	12	1794	4.0	0.0
			1796	4.0	0.0
24400	FILERS	6	1000	8.0	0.0
23800	PIPE-FITTERS	2	1000	4.0	0.0
			1776	1.2	0.0
			1621	1.2	0.0
			1630	0.8	0.0
			1700	0.8	0.0
23300	CARPENTERS	4	1000	4.0	0.0
			1776	1.2	0.0
			1621	1.2	0.0
			1630	0.8	0.0
			1700	0.8	0.0
22800	ELECTRICIANS	5	1677	2.0	0.0
			1776	4.0	0.0
			1621	0.8	0.0
			1630	0.4	0.0
			1700	0.8	0.0
22300	MECHANICS	3	1000	8.0	0.0
21900	MACHINISTS	3	1000	8.0	0.0
21300	MILLWRIGHT/PLANER	3	1000	4.0	0.0
			1702	0.8	0.0
			1621	0.8	0.0
			1740	2.4	0.0

ENVIRONMENTAL PROTECTION AGENCY BSN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
21100	MILLWRIGHT/GENERAL	4	1621	6.8	0.0
			1000	1.2	0.0
20700	RAILCAR LOADER	9	1747	8.0	0.0
20200	FORKLIFT OPERATOR	11	1800	8.0	0.0
20100	LUMBER CARRIER OPER	8	1810	8.0	0.0
19700	MOULDER OFFBEARER	2	1731	8.0	0.0
19600	MOULDER FEEDER	2	1727	6.4	0.0
			1726	1.6	0.0
19100	SPECIALTY RESAW OFFB	2	1760	8.0	0.0
19000	SPECIALTY RESAW OPER	2	1762	8.0	0.0
18100	CHECKERS	6	1740	8.0	0.0
17900	BANDER OPERATOR	3	1751	4.0	0.0
			1752	4.0	0.0
17600	DRY CHAIN PULLER	20	1741	8.0	0.0
17300	GRADER/PLANER MILL	16	1716	5.6	0.0
			1700	2.4	0.0
16800	PLANER SET-UP MAN	2	1702	1.0	0.0
			1711	3.5	0.0
			1716	3.5	0.0
16700	PLANER OPERATOR	8	1711	5.6	0.0
			1700	2.4	0.0

ENVIRONMENTAL PROTECTION AGENCY SCN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
16200	UNSTACKER PULLER	2	1693	8.0	0.0
16100	UNSTACKER-DRY	2	1692	8.0	0.0
16000	KILN OPERATOR	3	1000	8.0	0.0
15600	UNIPAC OPERATOR	2	1694	8.0	0.0
15500	STICKERMAN-GREEN	2	1691	8.0	0.0
15400	STACKER-GREEN	4	1690	8.0	0.0
15100	GREEN CHAIN PULLER	2	1682	8.0	0.0
14801	TRIMMER OPERATOR	4	1674	4.0	0.0
			1670	4.0	0.0
14800	TRIMMER OPERATOR	4	1670	4.0	0.0
			1672	4.0	0.0
14500	GREEN CHAIN OPERATOR	4	1682	8.0	0.0
14000	RESAW OPERATOR	2	1646	2.8	0.0
			1647	5.2	0.0
13700	CHIPPER OPERATOR	2	1784	4.8	0.0
			1783	0.8	0.0
			1621	2.4	0.0
13400	EDGER OPERATOR	4	1635	4.0	0.0
			1636	4.0	0.0
12700	TAIL SAWYER	4	1626	1.6	0.0
			1627	6.4	0.0

ENVIRONMENTAL PROTECTION AGENCY BSN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
12300	SAWYER	4	1622	1.6	0.0
			1623	6.4	0.0
11700	DECK SCALER	2	1613	0.4	0.0
			1621	7.6	0.0
11400	DEBARKER OPERATOR	2	1606	3.2	0.0
			1607	4.8	0.0
11100	LOG CARRIER OPER	1	1806	4.0	0.0
			1000	4.0	0.0
10800	LOG SORTER	2	1000	8.0	0.0
10700	POND SORTER	4	1000	8.0	0.0
10400	PLANER SUPERVISOR	4	1000	4.0	0.0
			1700	4.0	0.0
10100	SAWMILL SUPERVISOR	3	1798	4.0	0.0
			1776	1.6	0.0
			1621	1.2	0.0
			1630	1.2	0.0

PLANT NO. 2

ENVIRONMENTAL PROTECTION AGENCY

GEN JOB NO. 9635

INPUT EQUIPMENT DATA

SIC CODE: 242

PLANT NO: 2

DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1853	RIPSAW-SPECIALTY	92.0
1852	RIPSAW-SPECIALTY	82.0
1851	RIPSAW-SPECIALTY	94.0
1850	RIPSAW-SPECIALTY	84.0
1831	GANG SAW	77.0
1830	GANG SAW	77.0
1824	QUADSAW	97.0
1823	QUADSAW	95.0
1822	QUADSAW	90.0
1815	TRANSFER CARRIER	80.0
1810	LUMBER CARRIER	84.0
1810	LUMBER CARRIER	52.0
1802	FORKLIFT	90.0
1796	POWERHOUSE	90.0
1784	CHIPPER	104.0
1784	CHIPPER	108.0
1784	CHIPPER	105.0
1784	CHIPPER	105.0
1784	CHIPPER	102.0
1784	CHIPPER	105.0
1784	CHIPPER	108.0
1784	CHIPPER	104.0
1784	CHIPPER	105.0
1784	CHIPPER	102.0
1783	CHIPPER	92.0
1783	CHIPPER	86.0
1783	CHIPPER	94.0
1752	STACK BANDER	85.0
1751	STACK BANDER	78.0
1747	RAILCAR LOADER	85.0
1741	DRY CHAIN CONVEYR	83.0
1741	DRY CHAIN CONVEYR	85.0
1741	DRY CHAIN CONVEYR	57.0
1735	MOULDER	102.0
1734	MOULDER	95.0
1731	MOULDER/ENCL	76.0
1731	MOULDER/ENCL	77.0
1727	MOULDER/ENCL	81.0
1726	MOULDER/ENCL	75.0

ENVIRONMENTAL PROTECTION AGENCY SBN JOB NO. 963:

INPUT EQUIPMENT DATA

SIC CODE: 242 PLANT NO: 2 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1716	PLANER/ENCL	92.0
1716	PLANER/ENCL	92.0
1711	PLANER/ENCL	90.0
1711	PLANER/ENCL	90.0
1702	PLANER	109.0
1702	PLANER	106.0
1694	KILN CHAIN CONVYR	63.0
1692	KILN CHAIN CONVYR	55.0
1692	KILN CHAIN CONVYR	69.0
1691	KILN CHAIN CONVYR	66.0
1690	KILN CHAIN CONVYR	75.0
1690	KILN CHAIN CONVYR	66.0
1690	KILN CHAIN CONVYR	78.0
1667	KILN	65.0
1662	GREEN CHAIN CONVY	63.0
1662	GREEN CHAIN CONVY	65.0
1661	GREEN CHAIN CONVY	70.0
1672	TRIMMER	93.0
1672	TRIMMER	93.0
1670	TRIMMER	95.0
1655	RESAW-LARGE	74.0
1654	RESAW-LARGE	74.0
1639	EDGER	92.0
1639	EDGER	93.0
1636	EDGER	92.0
1636	EDGER	93.0
1636	EDGER	94.0
1637	EDGER	94.0
1637	EDGER	93.0
1637	EDGER	92.0
1623	HEADRIG	93.0
1622	HEADRIG	69.0
1617	CUT-OFF SAW	75.0
1616	CUT-OFF SAW	94.0
1603	DEBARKER	76.0
1603	DEBARKER	76.0
1602	DEBARKER	74.0
1602	DEBARKER	74.0
1513	WHEEL GRINDER	79.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT BACKGROUND DATA

SIC CODE: 242 PLANT NO: 2 DATE: 1980

BACK. CODE	GENERAL NAME	LEQ DBA	EQUIPMENT CONTRIBUTION TO BACKGROUND					
			CODE	CONTR.	CODE	CONTR.	CODE	CONTR.
1883	BACK/MECHANIC SHP	65.0	1000	1.00	0	0.0	0	0.0
1881	BACK/FILEROOM	84.0	1623	0.50	1822	0.40	1831	0.10
1881	BACK/FILEROOM	74.0	1623	0.50	1822	0.40	1831	0.10
1881	BACK/FILEROOM	78.0	1623	0.50	1822	0.40	1831	0.10
1879	BACK/PIPE SHOP	85.0	1513	0.60	1802	0.20	1784	0.20
1879	BACK/PIPE SHOP	65.0	1000	1.00	0	0.0	0	0.0
1875	BACK/CARPNTR SHOP	65.0	1000	1.00	0	0.0	0	0.0
1873	BACK/MACHINE SHOP	79.0	1513	1.00	0	0.0	0	0.0
1873	BACK/MACHINE SHOP	65.0	1000	1.00	0	0.0	0	0.0
1849	BACK/SPEC RIPSAW	84.0	1735	0.70	1651	0.30	0	0.0
1829	BACK/GANG SAW	91.0	1831	0.60	1822	0.20	1623	0.20
1820	BACK/QUAD SAW	94.0	1822	0.60	1831	0.20	1623	0.20
1814	BACK/TRANSFER RM	84.0	1690	0.70	1682	0.30	0	0.0
1793	BACK/POWERHOUSE	82.0	1796	1.00	0	0.0	0	0.0
1793	BACK/POWERHOUSE	84.0	1795	1.00	0	0.0	0	0.0
1740	BACK/DRY CHAIN	83.0	1692	0.70	1741	0.30	0	0.0
1700	BACK/PLANER	93.0	1702	0.80	1711	0.10	1716	0.10
1666	BACK/KILN&CNTL RM	86.0	1687	0.70	1682	0.10	1615	0.20
1660	BACK/GREEN CHAIN	83.0	1784	0.60	1672	0.20	1690	0.20
1665	BACK/TRIMMER	90.0	1670	0.90	1681	0.10	0	0.0
1645	BACK/RESAW	96.0	1654	0.60	1822	0.30	1831	0.10
1630	BACK/EDGER	91.0	1636	0.70	1822	0.30	0	0.0
1601	BACK/DEBARKER	81.0	1603	0.50	1617	0.50	0	0.0
1601	BACK/DEBARKER	89.0	1603	0.30	1617	0.70	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	2	108.5	0.71
1784	CHIPPER	10	104.8	2.04
1735	MOULDER	1	102.0	0.0
1824	QUADSAW	1	97.0	0.0
1645	BACK/RESAW	1	96.0	0.0
1670	TRIMMER	1	95.0	0.0
1734	MOULDER	1	95.0	0.0
1823	QUADSAW	1	95.0	0.0
1616	CUT-OFF SAW	1	94.0	0.0
1820	BACK/QUAD SAW	1	94.0	0.0
1851	RIPSAW-SPECIALTY	1	94.0	0.0
1623	HEADRIG	1	93.0	0.0
1637	EDGER	3	93.0	1.00
1638	EDGER	3	93.0	1.00
1672	TRIMMER	2	93.0	0.0
1700	BACK/PLANER	1	93.0	0.0
1639	EDGER	2	92.5	0.71
1716	PLANER/ENCL	2	92.0	0.0
1853	RIPSAW-SPECIALTY	1	92.0	0.0
1630	BACK/EDGER	1	91.0	0.0
1829	BACK/GANG SAW	1	91.0	0.0
1783	CHIPPER	3	90.7	4.16
1665	BACK/TRIMMER	1	90.0	0.0
1711	PLANER/ENCL	2	90.0	0.0
1796	POWERHOUSE	1	90.0	0.0
1802	FORKLIFT	1	90.0	0.0
1822	QUADSAW	1	90.0	0.0
1622	HEADRIG	1	89.0	0.0
1686	BACK/KILN&CNTL RM	1	88.0	0.0
1690	KILN CHAIN CONVYR	3	87.0	8.54
1692	KILN CHAIN CONVYR	2	87.0	2.83
1691	KILN CHAIN CONVYR	1	86.0	0.0
1601	BACK/DEBARKER	2	85.0	5.66
1687	KILN	1	85.0	0.0
1741	DRY CHAIN CONVEYR	3	85.0	2.00
1752	STACK BANDER	1	85.0	0.0
1682	GREEN CHAIN CONVY	2	84.0	1.41
1814	BACK/TRANSFER RM	1	84.0	0.0
1849	BACK/SPEC RIPSAW	1	84.0	0.0
1850	RIPSAW-SPECIALTY	1	84.0	0.0

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO.   9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242   PLANT NO. = 2   NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1680	BACK/GREEN CHAIN	1	83.0	0.0
1694	KILN CHAIN CONVYR	1	83.0	0.0
1740	BACK/DRY CHAIN	1	83.0	0.0
1793	BACK/POWERHOUSE	2	83.0	1.41
1852	RIPSAW-SPECIALTY	1	82.0	0.0
1727	MOULDER/ENCL	1	81.0	0.0
1815	TRANSFER CARRIER	1	80.0	0.0
1513	WHEEL GRINDER	1	79.0	0.0
1881	BACK/FILEROOM	3	78.7	5.03
1751	STACK BANDER	1	78.0	0.0
1731	MOULDER/ENCL	2	77.5	0.71
1603	DEBARKER	2	77.0	1.41
1830	GANG SAW	1	77.0	0.0
1831	GANG SAW	1	77.0	0.0
1681	GREEN CHAIN CONVY	1	76.0	0.0
1617	CUT-OFF SAW	1	75.6	0.0
1726	MOULDER/ENCL	1	75.0	0.0
1879	BACK/PIPE SHOP	2	75.0	14.14
1602	DEBARKER	2	74.0	0.0
1654	RESAW-LARGE	1	74.0	0.0
1655	RESAW-LARGE	1	74.0	0.0
1873	BACK/MACHINE SHOP	2	72.0	9.90
1875	BACK/CARPNTR SHOP	1	65.0	0.0
1883	BACK/MECHANIC SHP	1	65.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1779	CHIPPER	13	101.5	2.56
1699	PLANER	6	96.8	0.41
1819	QUADSAW	3	94.0	0.0
1664	TRIMMER	3	93.7	0.0
1629	EDGER	6	92.9	0.95
1620	HEADRIG	2	91.0	0.0
1800	FORKLIFT	1	90.0	0.0
1792	POWERHOUSE	1	90.0	0.0
1848	RIP SAW/SPECIALTY	4	88.0	0.0
1688	KILN CHAIN	7	86.3	7.16
1739	DRY CHAIN	3	85.0	2.00
1685	KILN	1	85.0	0.0
1610	CUT-OFF	2	84.9	0.0
1724	MOULDER	6	84.7	0.71
1810	LUMBER CARRIER	2	83.0	1.41
1749	STACK BANDER	2	81.5	0.0
1679	GREEN CHAIN	3	81.3	1.41
1813	TRANSFER CARRIER	1	80.0	0.0
1828	GANG SAW	2	77.0	0.0
1600	DEBARKER	4	75.5	1.00
1644	RESAW/LARGE	2	74.0	0.0
1747	RAIL CAR LOAD	1	65.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY
                                                         CBN JOB NO.   9635

                        INPUT PERSONNEL WORK ASSIGNMENTS
SIC CODE:  242                  PLANT NO:  2                    DATE: 1980
 JOB    JOB DESCRIPTION           NO OF    TIME SPENT USING EQUIPMENT CODE
CODE                              PERS.  CODE   TIME  CODE   TIME  CODE   TIME
 265    LABORER
                                    1   1000   50.0  1630   10.0  1740   10.0
                                        1620   15.0  1700   15.0     0    0.0
 261    CLEAN-UP MAN/REGULAR        1   1700  100.0     0    0.0     0    0.0
 248    POWERHOUSE OPERATOR         3   1793  100.0     0    0.0     0    0.0
 245    OILER
                                    2   1601   20.0  1820   20.0  1645   20.0
                                        1629   20.0  1630   20.0     0    0.0
 244    FILERS
                                    7   1661  100.0     0    0.0     0    0.0
 238    PIPE-FITTERS
                                    1   1679   15.0  1000    5.0  1620   30.0
                                        1740   30.0  1793   20.0     0    0.0
 233    CARPENTERS
                                    1   1620   20.0  1645   20.0  1630   20.0
                                        1700   20.0  1740   20.0     0    0.0
 228    ELECTRICIANS
                                    3   1620   20.0  1645   20.0  1630   20.0
                                        1700   20.0  1740   20.0     0    0.0
 223    MECHANICS
                                    1   1663  100.0     0    0.0     0    0.0
 219    MACHINISTS
                                    5   1673   20.0  1820   20.0  1630   20.0
                                        1700   20.0  1740   20.0     0    0.0
 211    MILLWRIGHT/GENERAL
                                    5   1601   20.0  1820   20.0  1645   20.0
                                        1629   20.0  1630   20.0     0    0.0
 207    RAILCAR LOADER              2   1747  100.0     0    0.0     0    0.0
 202    FORKLIFT OPERATOR           5   1752   20.0  1502   80.0     0    0.0
 201    LUMBER CARRIER OPER         3   1510  100.0     0    0.0     0    0.0
 197    MOULDER OFFBEARER           1   1731  100.0     0    0.0     0    0.0
 196    MOULDER FEEDER              1   1727   80.0  1734   20.0     0    0.0
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ENVIRONMENTAL PROTECTION AGENCY

SBR JOB NO. 963

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 2

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
186	RIPSAW OFFBEARER	1	1653	100.0	0	0.0	0	0.0
185	RIPSAW OPERATOR	1	1651	100.0	0	0.0	0	0.0
179	BANDER OPERATOR	2	1752	100.0	0	0.0	0	0.0
176	DRY CHAIN PULLER	14	1741	88.0	1694	12.0	0	0.0
173	GRADER/PLANER MILL	8	1716	100.0	0	0.0	0	0.0
167	PLANER OPERATOR	4	1711	98.0	1702	2.0	0	0.0
161	UNSTACKER-DRY	2	1692	85.0	1700	15.0	0	0.0
160	KILN OPERATOR	1	1566	5.0	1614	95.0	0	0.0
159	TRANSFER OPERATOR	2	1614	50.0	1615	50.0	0	0.0
155	STICKERMAN-GREEN	2	1740	35.0	1691	65.0	0	0.0
154	STACKER-GREEN	2	1740	35.0	1690	65.0	0	0.0
154	STACKER-GREEN	2	1690	100.0	0	0.0	0	0.0
151	GREEN CHAIN PULLER	2	1681	100.0	0	0.0	0	0.0
148	TRIMMER OPERATOR	2	1670	100.0	0	0.0	0	0.0
145	GREEN CHAIN OPERATOR	2	1682	100.0	0	0.0	0	0.0
143	UNSCRAMBLE OPERATOR	2	1672	100.0	0	0.0	0	0.0
140	RESAW OPERATOR	2	1654	90.0	1655	10.0	0	0.0
137	CHIPPER OPERATOR	2	1639	50.0	1764	25.0	1763	25.0
134	EDGER OPERATOR	6	1638	70.0	1637	30.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

DBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 2

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
133	SLAB BOARD PULLER	2	1639	100.0	0	0.0	0	0.0
131	GANG SAW OPERATOR	2	1631	90.0	1830	10.0	0	0.0
128	QUADSAW TAIL SAWYER	2	1624	100.0	0	0.0	0	0.0
123	SAWYER	4	1623	45.0	1622	5.0	1622	50.0
114	DEBARKER OPERATOR	2	1603	60.0	1602	35.0	1617	5.0
114	DEBARKER OPERATOR	2	1603	100.0	0	0.0	0	0.0
107	POND SORTER	2	1000	100.0	0	0.0	0	0.0
101	SAWMILL SUPERVISOR	2	1601	20.0	1820	20.0	1645	20.0
			1629	20.0	1630	20.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26500	LABORER	1	1000	4.0	0.0
			1630	0.8	0.0
			1740	0.8	0.0
			1820	1.2	0.0
			1700	1.2	0.0
26100	CLEAN-UP MAN/REGULAR	1	1700	8.0	0.0
24800	POWERHOUSE OPERATOR	3	1793	8.0	0.0
24500	OILER	2	1631	1.6	0.0
			1820	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0
			1630	1.6	0.
24400	FILERS	7	1881	8.0	0.0
23800	PIPE-FITTERS	1	1879	1.2	0.0
			1000	0.4	0.0
			1820	2.4	0.0
			1740	2.4	0.0
			1793	1.6	0.0
23300	CARPENTERS	1	1820	1.6	0.0
			1645	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0
22800	ELECTRICIANS	3	1820	1.6	0.0
			1645	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY

DBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
22300	MECHANICS	1	1883	8.0	0.0
21900	MACHINISTS	5	1873	1.6	0.0
			1820	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0
21100	MILLWRIGHT/GENERAL	5	1601	1.6	0.0
			1820	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0.0
			1630	1.6	0.0
20700	RAILCAR LOADER	2	1747	8.0	0.0
20200	FORKLIFT OPERATOR	5	1752	1.6	0.0
			1602	6.4	0.0
20100	LUMBER CARRIER OPER	3	1610	8.0	0.0
19700	MOULDER OFFBEARER	1	1731	8.0	0.0
19600	MOULDER FEEDER	1	1727	6.4	0.0
			1734	1.6	0.0
18600	RIPSAW OFFBEARER	1	1853	8.0	0.0
18500	RIPSAW OPERATOR	1	1851	8.0	0.0
17900	BANDER OPERATOR	2	1752	8.0	0.0
17600	DRY CHAIN PULLER	14	1741	7.0	0.0
			1694	1.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BCN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
17300	GRADER/PLANER MILL	8	1716	8.0	0.0
16700	PLANER OPERATOR	4	1711	7.8	0.0
			1702	0.2	0.0
16100	UNSTACKER-DRY	2	1692	6.8	0.0
			1700	1.2	0.0
16000	KILN OPERATOR	1	1686	0.4	0.0
			1614	7.6	0.0
15900	TRANSFER OPERATOR	2	1814	4.0	0.0
			1815	4.0	0.0
15500	STICKERMAN-GREEN	2	1740	2.8	0.0
			1691	5.2	0.0
15401	STACKER-GREEN	2	1690	8.0	0.0
15400	STACKER-GREEN	2	1740	2.8	0.0
			1690	5.2	0.0
15100	GREEN CHAIN PULLER	2	1681	8.0	0.0
14800	TRIMMER OPERATOR	2	1670	8.0	0.0
14500	GREEN CHAIN OPERATOR	2	1682	8.0	0.0
14300	UNSCRAMBLE OPERATOR	2	1672	8.0	0.0
14000	RESAW OPERATOR	2	1654	7.2	0.0
			1655	0.8	0.0
13700	CHIPPER OPERATOR	2	1659	4.0	0.0
			1754	2.0	0.0
			1755	2.0	0.0

146

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13400	EDGER OPERATOR	6	1636	5.6	0.0
			1637	2.4	0.0
13300	SLAB BOARD PULLER	2	1639	8.0	0.0
13100	GANG SAW OPERATOR	2	1831	7.2	0.0
			1830	0.8	0.0
12600	QUADSAW TAIL SAWYER	2	1824	8.0	0.0
12300	SAWYER	4	1623	3.6	0.0
			1622	0.4	0.0
			1822	4.0	0.0
11401	DEBARKER OPERATOR	2	1603	8.0	0.0
11400	DEBARKER OPERATOR	2	1603	4.6	0.0
			1602	2.6	0.0
			1617	0.4	0.0
10700	POND SORTER	2	1000	8.0	0.0
10100	SAWMILL SUPERVISOR	2	1601	1.6	0.0
			1620	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0.0
			1630	1.6	0.0

PLANT NO. 3

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9835

INPUT EQUIPMENT DATA

SIC CODE: 242 PLANT NO: 3 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1802	FORKLIFT	90.0
1796	POWERHOUSE	87.0
1794	POWERHOUSE	91.0
1741	DRY CHAIN CONVEYR	86.0
1741	DRY CHAIN CONVEYR	88.0
1741	DRY CHAIN CONVEYR	93.0
1716	PLANER/ENCL	98.0
1716	PLANER/ENCL	98.0
1711	PLANER/ENCL	102.0
1710	PLANER/ENCL	93.0
1702	PLANER	115.0
1694	KILN CHAIN CONVYR	85.0
1691	KILN CHAIN CONVYR	90.0
1691	KILN CHAIN CONVYR	81.0
1690	KILN CHAIN CONVYR	94.0
1690	KILN CHAIN CONVYR	81.0
1690	KILN CHAIN CONVYR	83.0
1683	GREEN CHAIN CONVY	95.0
1682	GREEN CHAIN CONVY	80.0
1672	TRIMMER	94.0
1670	TRIMMER	98.0
1669	TRIMMER	94.0
1647	RESAW-LARGE	96.0
1646	RESAW-LARGE	94.0
1638	EDGER	93.0
1637	EDGER	89.0
1623	HEADRIG	80.0
1622	HEADRIG	75.0
1617	CUT-OFF SAW	82.0
1616	CUT-OFF SAW	88.0
1603	DEBARKER	86.0
1602	DEBARKER	82.0

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   965

                                INPUT BACKGROUND DATA

SIC CODE:  242                   PLANT NO:  3                          DATE: 1980

BACK. GENERAL NAME              LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                            DBA   CODE CONTR.  CODE CONTR.  CODE CONTR.

1681  BACK/FILEROOM             84.0  1623  0.70   1638  0.30      0  0.0
1873  BACK/MACHINE SHOP         65.0  1000  1.00      0  0.0       0  0.0
1871  BACK/BASEMENT             96.0  1623  0.60   1635  0.40      0  0.0
1871  BACK/BASEMENT             89.0  1672  0.60   1662  0.40      0  0.0
1793  BACK/POWERHOUSE           66.0  1794  0.50   1796  0.50      0  0.0
1740  BACK/DRY CHAIN            79.0  1670  0.70   1741  0.30      0  0.0
1700  BACK/PLANER               94.0  1702  0.80   1716  0.20      0  0.0
1700  BACK/PLANER               92.0  1702  0.80   1711  0.20      0  0.0
1686  BACK/KILN&CNTL RM         82.0  1802  0.30   1741  0.70      0  0.0
1660  BACK/GREEN CHAIN          82.0  1693  0.60   1662  0.40      0  0.0
1660  BACK/GREEN CHAIN          93.0  1683  0.60   1662  0.40      0  0.0
1665  BACK/TRIMMER              93.0  1672  0.80   1662  0.20      0  0.0
1645  BACK/RESAW                96.0  1647  0.90   1663  0.10      0  0.0
1630  BACK/EDGER                97.0  1638  0.80   1623  0.20      0  0.0
1621  BACK/HEADRIG              93.0  1623  0.80   1638  0.20      0  0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	1	115.0	0.0
1711	PLANER/ENCL	1	102.0	0.0
1630	BACK/EDGER	1	97.0	0.0
1645	BACK/RESAW	1	96.0	0.0
1647	RESAW-LARGE	1	96.0	0.0
1670	TRIMMER	1	96.0	0.0
1716	PLANER/ENCL	2	96.0	0.0
1683	GREEN CHAIN CONVY	1	95.0	0.0
1646	RESAW-LARGE	1	94.0	0.0
1669	TRIMMER	1	94.0	0.0
1672	TRIMMER	1	94.0	0.0
1621	BACK/HEADRIG	1	93.0	0.0
1638	EDGER	1	93.0	0.0
1665	BACK/TRIMMER	1	93.0	0.0
1700	BACK/PLANER	2	93.0	1.41
1710	PLANER/ENCL	1	93.0	0.0
1871	BACK/BASEMENT	2	92.5	4.95
1794	POWERHOUSE	1	91.0	0.0
1802	FORKLIFT	1	90.0	0.0
1637	EDGER	1	89.0	0.0
1741	DRY CHAIN CONVEYR	3	89.0	3.61
1793	BACK/POWERHOUSE	1	88.0	0.0
1680	BACK/GREEN CHAIN	2	87.5	7.78
1796	POWERHOUSE	1	87.0	0.0
1603	DEBARKER	1	86.0	0.0
1616	CUT-OFF SAW	1	86.0	0.0
1690	KILN CHAIN CONVYR	3	86.0	7.00
1691	KILN CHAIN CONVYR	2	85.5	6.36
1881	BACK/FILEROOM	1	84.0	0.0
1694	KILN CHAIN CONVYR	1	83.0	0.0
1693	BACK. ONLY CONTR.	1	82.3	7.78
1602	DEBARKER	1	82.0	0.0
1617	CUT-OFF SAW	1	82.0	0.0
1686	BACK/KILN&CNTL RM	1	82.0	0.0
1623	HEADRIG	1	80.0	0.0
1682	GREEN CHAIN CONVY	1	80.0	0.0
1740	BACK/DRY CHAIN	1	79.0	0.0
1622	HEADRIG	1	75.0	0.0
1673	BACK/MACHINE SHOP	1	65.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1699	PLANER	5	100.4	0.0
1644	RESAW/LARGE	2	95.0	0.0
1664	TRIMMER	3	94.7	0.0
1629	EDGER	2	91.0	0.0
1800	FORKLIFT	1	90.0	0.0
1792	POWERHOUSE	2	89.0	0.0
1739	DRY CHAIN	3	89.0	3.61
1679	GREEN CHAIN	2	87.5	0.0
1688	KILN CHAIN	7	84.9	6.79
1610	CUT-OFF	2	84.0	0.0
1600	DEBARKER	2	84.0	0.0
1620	HEADRIG	2	77.5	0.0

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ENVIRONMENTAL PROTECTION AGENCY
                                                          SEN JOB NO.   9835

                    INPUT PERSONNEL WORK ASSIGNMENTS
SIC CODE:  242
                              PLANT NO:  3
                                                              DATE: 1980
 JOB   JOB DESCRIPTION           NO OF    TIME SPENT USING EQUIPMENT CODE
CODE                             PERS.  CODE  TIME  CODE  TIME  CODE  TIME
 265   LABORER
                                   1   1000  40.0  1680  15.0  1700  30.0
                                       1740  15.0     0   0.0     0   0.0
 262   CLEAN-UP MAN/DOWN TM        1   1000 100.0     0   0.0     0   0.0
 261   CLEAN-UP MAN/REGULAR        1   1000  40.0  1671  45.0  1621   5.0
                                       1630   5.0  1645   5.0     0   0.0
 248   POWERHOUSE OPERATOR         3   1686   5.0  1795  95.0     0   0.0
 244   FILERS
                                   4   1681 100.0     0   0.0     0   0.0
 213   MILLWRIGHT/PLANER           3   1680  25.0  1700  50.0  1740  25.0
 212   MILLWRIGHT/SAWMILL
                                   3   1671  20.0  1621  20.0  1630  20.0
                                       1645  20.0  1660  20.0     0   0.0
 207   RAILCAR LOADER              2   1000 100.0     0   0.0     0   0.0
 202   FORKLIFT OPERATOR           8   1600 100.0     0   0.0     0   0.0
 182   TALLYMEN                    3   1000 100.0     0   0.0     0   0.0
 176   DRY CHAIN PULLER           12   1741  88.0  1694  12.0     0   0.0
 173   GRADER/PLANER MILL          6   1716 100.0     0   0.0     0   0.0
 167   PLANER OPERATOR             3   1711  90.0  1702  10.0     0   0.0
 155   STICKERMAN-GREEN            3   1691  90.0  1680  10.0     0   0.0
 154   STACKER-GREEN               3   1680  90.0  1660  10.0     0   0.0
 151   GREEN CHAIN PULLER         12   1663 100.0     0   0.0     0   0.0
 146   TRIMMER OPERATOR            3   1670  95.0  1000   5.0     0   0.0
 148   TRIMMER OPERATOR            3   1672  90.0  1630  10.0     0   0.0
```

ENVIRONMENTAL PROTECTION AGENCY

DBM JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 3

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	TIME	CODE	TIME	CODE	TIME
144	LUMBER DIVERTER	3	1663	95.0	1660	5.0	0	0.0
140	RESAW OPERATOR	3	1647	65.0	1646	35.0	0	0.0
134	EDGER OPERATOR	3	1636	95.0	1637	5.0	0	0.0
123	SAWYER	3	1623	70.0	1622	30.0	0	0.0
114	DEBARKER OPERATOR	3	1603	70.0	1602	25.0	1617	5.0
104	PLANER SUPERVISOR	3	1621	20.0	1630	20.0	1645	20.0
			1680	20.0	1665	20.0	0	0.0
101	SAWMILL SUPERVISOR	3	1621	20.0	1630	20.0	1645	20.0
			1680	20.0	1665	20.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26500	LABORER	1	1000	3.2	0.0
			1680	1.2	0.0
			1700	2.4	0.0
			1740	1.2	0.0
26200	CLEAN-UP MAN/DOWN TM	1	1000	8.0	0.0
26100	CLEAN-UP MAN/REGULAR	1	1000	3.2	0.0
			1871	3.6	0.0
			1621	0.4	0.0
			1630	0.4	0.0
			1645	0.4	0.0
24800	POWERHOUSE OPERATOR	3	1680	0.4	0.0
			1793	7.6	0.0
24400	FILERS	4	1881	3.0	0.0
21300	MILLWRIGHT/PLANER	3	1680	2.0	0.0
			1700	4.0	0.0
			1740	2.0	0.0
21200	MILLWRIGHT/SAWMILL	3	1871	1.6	0.0
			1621	1.6	0.0
			1630	1.6	0.0
			1645	1.6	0.0
			1680	1.6	0.0
20700	RAILCAR LOADER	2	1000	8.0	0.0
20200	FORKLIFT OPERATOR	6	1800	8.0	0.0
18200	TALLYMEN	3	1000	8.0	0.0
17600	DRY CHAIN PULLER	12	1741	7.0	0.0
			1694	1.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242

PLANT NO. = 3

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
17300	GRADER/PLANER MILL	6	1716	8.0	0.0
16700	PLANER OPERATOR	3	1711	7.2	0.0
			1702	0.8	0.0
15500	STICKERMAN-GREEN	3	1691	7.2	0.0
			1680	0.8	0.0
15400	STACKER-GREEN	3	1680	7.2	0.0
			1680	0.8	0.0
15100	GREEN CHAIN PULLER	12	1683	8.0	0.0
14801	TRIMMER OPERATOR	3	1672	7.2	0[illegible]
			1680	0.8	0.[illegible]
14800	TRIMMER OPERATOR	3	1670	7.6	0.0
			1000	0.4	0.0
14400	LUMBER DIVERTER	3	1683	7.6	0.0
			1680	0.4	0.0
14000	RESAW OPERATOR	3	1647	5.2	0.0
			1646	2.8	0.0
13400	EDGER OPERATOR	3	1638	7.6	0.0
			1637	0.4	0.0
12300	SAWYER	3	1623	5.6	0.0
			1622	2.4	0.0
11400	DEBARKER OPERATOR	3	1603	5.6	0.0
			1602	2.0	0.0
			1617	0.4	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
10400	PLANER SUPERVISOR	3	1621	1.6	0.0
			1630	1.6	0.0
			1645	1.6	0.0
			1680	1.6	0.0
			1665	1.6	0.0
10100	SAWMILL SUPERVISOR	3	1621	1.6	0.0
			1630	1.6	0.0
			1645	1.6	0.0
			1680	1.6	0.0
			1665	1.6	0.0

PLANT NO. 4

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9035

INPUT EQUIPMENT DATA

SIC CODE: 242

PLANT NO: 4

DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1683	GREEN CHAIN CONVY	95.0
1682	GREEN CHAIN CONVY	92.0
1672	TRIMMER	95.0
1669	TRIMMER	93.0
1647	RESAW-LARGE	93.0
1638	EDGER	72.0
1637	EDGER	69.0
1623	HEADRIG	81.0
1622	HEADRIG	76.0
1617	CUT-OFF SAW	71.0
1616	CUT-OFF SAW	65.0
1603	DEBARKER	69.0
1602	DEBARKER	65.0

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                                INPUT BACKGROUND DATA

SIC CODE:  242                       PLANT NO:  4                        DATE: 1980

BACK. GENERAL NAME                  LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                                DBA   CODE CONTR.   CODE CONTR.   CODE CONTR.

1881  BACK/FILEROOM                81.0   1623  0.80    1636  0.20       0  0.0
1871  BACK/BASEMENT                94.0   1623  0.60    1638  0.40       0  0.0
1871  BACK/BASEMENT                86.0   1672  0.50    1633  0.50       0  0.0
1760  BACK/CHIPPER                100.0   1782  1.00       0  0.0        0  0.0
1680  BACK/GREEN CHAIN             74.0   1682  0.50    1663  0.30    1672  0.20
1680  BACK/GREEN CHAIN             90.0   1682  0.60    1672  0.40       0  0.0
1665  BACK/TRIMMER                 93.0   1672  0.70    1662  0.30       0  0.0
1630  BACK/EDGER                   93.0   1636  0.80    1623  0.20       0  0.0
1621  BACK/HEADRIG                 96.0   1623  0.80    1636  0.20       0  0.0
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1782	BACK. ONLY CONTR.	2	100.0	0.0
1780	BACK/CHIPPER	1	100.0	0.0
1621	BACK/HEADRIG	1	98.0	0.0
1672	TRIMMER	1	95.0	0.0
1683	GREEN CHAIN CONVY	1	95.0	0.0
1630	BACK/EDGER	1	93.0	0.0
1647	RESAW-LARGE	1	93.0	0.0
1665	BACK/TRIMMER	1	93.0	0.0
1669	TRIMMER	1	93.0	0.0
1682	GREEN CHAIN CONVY	1	92.0	0.0
1871	BACK/BASEMENT	2	90.0	5.66
1680	BACK/GREEN CHAIN	2	82.0	11.31
1623	HEADRIG	1	81.0	0.0
1881	BACK/FILEROOM	1	81.0	0.0
1622	HEADRIG	1	76.0	0.0
1638	EDGER	1	72.0	0.0
1617	CUT-OFF SAW	1	71.0	0.0
1603	DEBARKER	1	69.0	0.0
1637	EDGER	1	69.0	0.0
1602	DEBARKER	1	65.0	0.0
1616	CUT-OFF SAW	1	65.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1779	CHIPPER	2	100.0	0.0
1664	TRIMMER	2	94.0	0.0
1679	GREEN CHAIN	2	93.5	0.0
1644	RESAW/LARGE	1	93.0	0.0
1620	HEADRIG	2	78.5	0.0
1629	EDGER	2	70.5	0.0
1610	CUT-OFF	2	68.0	0.0
1600	DEBARKER	2	67.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

DBN JOB NO. 9035

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 4

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	 TIME	 CODE	 TIME	 CODE	 TIME
262	CLEAN-UP MAN/DOWN TM	1	1000	100.0	0	0.0	0	0.0
261	CLEAN-UP MAN/REGULAR	2	1000	50.0	1871	20.0	1621	15.0
			1030	15.0	0	0.0	0	0.0
244	FILERS	5	1000	5.0	1881	95.0	0	0.0
216	SHOPMAN/GENERAL	1	1000	60.0	1621	10.0	1660	10.0
			1030	10.0	1665	10.0	0	0.0
212	MILLWRIGHT/SAWMILL	4	1047	3.0	1061	27.0	1030	25.0
			1665	25.0	1660	20.0	0	0.0
202	FORKLIFT OPERATOR	5	1600	50.0	1662	40.0	1660	10.0
151	GREEN CHAIN PULLER	9	1582	80.0	1660	20.0	0	0.0
148	TRIMMER OPERATOR	3	1672	80.0	1665	20.0	0	0.0
144	LUMBER DIVERTER	3	1683	80.0	1660	5.0	1671	15.0
134	EDGER OPERATOR	3	1638	80.0	1637	20.0	0	0.0
123	SAWYER	5	1623	70.0	1622	30.0	0	0.0
114	DEBARKER OPERATOR	5	1603	70.0	1602	25.0	1617	5.0
101	SAWMILL SUPERVISOR	3	1000	5.0	1621	25.0	1030	25.0
			1665	25.0	1660	20.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26200	CLEAN-UP MAN/DOWN TM	1	1000	8.0	0.0
26100	CLEAN-UP MAN/REGULAR	2	1000	4.0	0.0
			1871	1.6	0.0
			1621	1.2	0.0
			1630	1.2	0.0
24400	FILERS	5	1000	0.4	0.0
			1881	7.6	0.0
21600	SHOPMAN/GENERAL	1	1000	4.8	0.0
			1621	0.8	0.0
			1680	0.8	0.0
			1630	0.8	0.0
			1665	0.8	0.0
21200	MILLWRIGHT/SAWMILL	4	1647	0.2	0.0
			1881	2.2	0.0
			1630	2.0	0.0
			1665	2.0	0.0
			1680	1.6	0.0
20200	FORKLIFT OPERATOR	3	1800	4.0	0.0
			1682	3.2	0.0
			1680	0.8	0.0
15100	GREEN CHAIN PULLER	9	1682	6.4	0.0
			1680	1.6	0.0
14800	TRIMMER OPERATOR	3	1672	6.4	0.0
			1665	1.6	0.0
14400	LUMBER DIVERTER	3	1683	6.4	0.0
			1680	0.4	0.0
			1871	1.2	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13400	EDGER OPERATOR	3	1638	6.4	0.0
			1637	1.6	0.0
12300	SAWYER	3	1623	5.6	0.0
			1622	2.4	0.0
11400	DEBARKER OPERATOR	3	1603	5.6	0.0
			1602	2.0	0.0
			1617	0.4	0.0
10100	SAWMILL SUPERVISOR	3	1000	0.4	0.0
			1621	2.0	0.0
			1630	2.0	0.0
			1665	2.0	0.0
			1680	1.6	0.0

PLANT NO. 5

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                INPUT EQUIPMENT DATA

SIC CODE:  242                      PLANT NO:  5                    DATE: 1980

EQUIP.          GENERIC NAME              LEQ
 CODE                                     dBA

 1810           LUMBER CARRIER            83.0
 1802           FORKLIFT                  84.0
 1802           FORKLIFT                  89.0
 1790           HOG                      102.0
 1789           HOG                      102.0
 1784           CHIPPER                  102.0
 1784           CHIPPER                   93.0
 1783           CHIPPER                   85.0
 1783           CHIPPER                   89.0
 1742           DRY CHAIN CONVEYR         86.9
 1740           BACK/DRY CHAIN            52.5
 1716           PLANER/ENCL               93.0
 1711           PLANER/ENCL               95.0
 1711           PLANER/ENCL               97.0
 1710           PLANER/ENCL               92.0
 1702           PLANER                   112.0
 1695           KILN CHAIN CONVYR         91.0
 1693           KILN CHAIN CONVYR         91.0
 1693           KILN CHAIN CONVYR         87.0
 1693           KILN CHAIN CONVYR         85.0
 1693           KILN CHAIN CONVYR         79.0
 1693           KILN CHAIN CONVYR         83.0
 1692           KILN CHAIN CONVYR         86.0
 1692           KILN CHAIN CONVYR         91.0
 1691           KILN CHAIN CONVYR         92.0
 1691           KILN CHAIN CONVYR         83.0
 1690           KILN CHAIN CONVYR         93.0
 1690           KILN CHAIN CONVYR         85.0
 1683           GREEN CHAIN CONVY         98.0
 1683           GREEN CHAIN CONVY         93.0
 1682           GREEN CHAIN CONVY         86.0
 1682           GREEN CHAIN CONVY         83.0
 1682           GREEN CHAIN CONVY         83.0
 1682           GREEN CHAIN CONVY         82.0
 1670           TRIMMER                   93.0
 1670           TRIMMER                   94.0
 1669           TRIMMER                   90.0
 1669           TRIMMER                   94.0
 1665           BACK/TRIMMER              90.0
```

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 903

INPUT EQUIPMENT DATA

SIC CODE: 242

PLANT NO: 5

DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1647	RESAW-LARGE	92.0
1646	RESAW-LARGE	85.0
1636	EDGER	101.0
1635	EDGER	94.0
1627	HEADRIG	102.0
1626	HEADRIG	99.0
1623	HEADRIG	76.0
1622	HEADRIG	73.0
1619	CUT-OFF SAW	95.0
1618	CUT-OFF SAW	94.0
1603	DEBARKER	88.0
1602	DEBARKER	86.0

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ENVIRONMENTAL PROTECTION AGENCY                                 GEN JOB NO.   9635

                          INPUT BACKGROUND DATA

SIC CODE:  242                    PLANT NO:  5                    DATE: 1980

BACK. GENERAL NAME            LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                          DBA   CODE CONTR.  CODE CONTR.  CODE CONTR.

1881  BACK/FILEROOM           86.0  1623  0.60   1636  0.40      0  0.0
1881  BACK/FILEROOM           90.0  1647  0.50   1783  0.40   1636  0.10
1881  BACK/FILEROOM           83.0  1702  0.70   1670  0.30      0  0.0
1780  BACK/CHIPPER           100.0  1784  1.00      0  0.0       0  0.0
1700  BACK/PLANER             92.0  1702  0.80   1713  0.20      0  0.0
1689  BACK/KILN CHAIN         90.0  1690  1.00      0  0.0       0  0.0
1689  BACK/KILN CHAIN         89.0  1692  0.80   1802  0.20      0  0.0
1686  BACK/KILN&CNTL RM       77.0  1687  1.00      0  0.0       0  0.0
1686  BACK/KILN&CNTL RM       76.0  1687  1.00      0  0.0       0  0.0
1686  BACK/KILN&CNTL RM       91.0  1687  1.00      0  0.0       0  0.0
1686  BACK/KILN&CNTL RM       88.0  1687  1.00      0  0.0       0  0.0
1680  BACK/GREEN CHAIN        79.0  1681  1.00      0  0.0       0  0.0
1645  BACK/RESAW              97.0  1647  1.00      0  0.0       0  0.0
1630  BACK/EDGER              94.0  1636  0.70   1623  0.30      0  0.0
1630  BACK/EDGER              97.0  1636  0.90   1670  0.10      0  0.0
1621  BACK/HEADRIG            95.0  1623  0.70   1619  0.10   1636  0.20
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	1	112.0	0.0
1627	HEADRIG	1	102.0	0.0
1789	HOG	1	102.0	0.0
1790	HOG	1	102.0	0.0
1636	EDGER	1	101.0	0.0
1780	BACK/CHIPPER	1	100.0	0.0
1626	HEADRIG	1	99.0	0.0
1784	CHIPPER	2	97.5	6.36
1645	BACK/RESAW	1	97.0	0.0
1711	PLANER/ENCL	2	96.0	1.41
1630	BACK/EDGER	2	95.5	2.12
1683	GREEN CHAIN CONVY	2	95.5	3.54
1619	CUT-OFF SAW	1	95.0	0.0
1621	BACK/HEADRIG	1	95.0	0.0
1618	CUT-OFF SAW	1	94.0	0.0
1635	EDGER	1	94.0	0.0
1670	TRIMMER	2	93.5	0.71
1715	PLANER/ENCL	1	93.0	0.0
1647	RESAW-LARGE	1	92.0	0.0
1669	TRIMMER	2	92.0	2.83
1700	BACK/PLANER	1	92.0	0.0
1710	PLANER/ENCL	1	92.0	0.0
1695	KILN CHAIN CONVYR	1	91.0	0.0
1665	BACK/TRIMMER	1	90.0	0.0
1689	BACK/KILN CHAIN	2	89.5	0.71
1690	KILN CHAIN CONVYR	2	89.0	5.66
1692	KILN CHAIN CONVYR	2	88.5	3.54
1603	DEBARKER	1	88.0	0.0
1691	KILN CHAIN CONVYR	2	87.5	6.36
1783	CHIPPER	2	87.0	2.83
1742	DRY CHAIN CONVEYR	1	86.9	0.0
1802	FORKLIFT	2	86.5	3.54
1881	BACK/FILEROOM	3	86.3	3.51
1602	DEBARKER	1	86.0	0.0
1713	BACK. ONLY CONTR.	0	85.0	0.0
1646	RESAW-LARGE	1	85.0	0.0
1693	KILN CHAIN CONVYR	5	85.0	4.47
1682	GREEN CHAIN CONVY	4	83.5	1.73
1687	BACK. ONLY CONTR.	0	83.0	7.02
1686	BACK/KILN&CNTL RM	4	83.0	7.02

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

               BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE =  242              PLANT NO. =  5                NO DATES SPECIFIED

EQUIP.        GENERIC NAME              NO. OF          MEAN          STD.
 CODE                                   SAMPLES       LEQ(DBA)        DEV.

 1740       BACK/DRY CHAIN                 1            82.8          0.0
 1681       BACK. ONLY CONTR.              0            79.0          0.0
 1680       BACK/GREEN CHAIN               1            79.0          0.0
 1623       HEADRIG                        1            76.0          0.0
 1622       HEADRIG                        1            73.0          0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1785	HOG	2	102.0	0.0
1699	PLANER	5	97.8	2.00
1629	EDGER	2	97.5	0.0
1610	CUT-OFF	2	94.5	0.0
1664	TRIMMER	5	92.3	2.06
1779	CHIPPER	4	92.3	4.92
1644	RESAW/LARGE	2	88.5	0.0
1679	GREEN CHAIN	6	87.5	2.68
1620	HEADRIG	4	87.5	0.0
1688	KILN CHAIN	12	87.2	4.88
1600	DEBARKER	2	87.0	0.0
1800	FORKLIFT	2	86.5	3.54
1739	DRY CHAIN	2	84.8	0.0
1810	LUMBER CARRIER	1	83.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9655

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242 PLANT NO: 5 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
265	LABORER	1	1000	20.0	1740	80.0	0	0.0
261	CLEAN-UP MAN/REGULAR	1	1000 1740	50.0 10.0	1700 1689	20.0 10.0	1680 0	10.0 0.0
228	ELECTRICIANS	1	1000 1621	50.0 10.0	1630 0	30.0 0.0	1645 0	10.0 0.0
211	MILLWRIGHT/GENERAL	2	1681 1621	50.0 10.0	1630 0	30.0 0.0	1645 0	10.0 0.0
202	FORKLIFT OPERATOR	3	1502	70.0	1000	30.0	0	0.0
202	FORKLIFT OPERATOR	2	1602	40.0	1000	60.0	0	0.0
201	LUMBER CARRIER OPER	1	1610	35.0	1000	65.0	0	0.0
182	TALLYMEN	1	1695	80.0	1665	20.0	0	0.0
176	DRY CHAIN PULLER	4	1742	80.0	1665	20.0	0	0.0
173	GRADER/PLANER MILL	2	1716	100.0	0	0.0	0	0.0
168	PLANER SET-UP MAN	1	1702	20.0	1700	55.0	1681	25.0
167	PLANER OPERATOR	1	1711	95.0	1710	5.0	0	0.0
163	GRADER/SORTING CHAIN	1	1682	80.0	1689	20.0	0	0.0
162	UNSTACKER PULLER	3	1692	40.0	1740	60.0	0	0.0
161	UNSTACKER-DRY	1	1692	40.0	1740	60.0	0	0.0
160	KILN OPERATOR	1	1686	80.0	1000	20.0	0	0.0
155	STICKERMAN-GREEN	1	1691	25.0	1689	75.0	0	0.0
154	STACKER-GREEN	1	1690	100.0	0	0.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

GEN JOB NO. 963

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 5

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
151	GREEN CHAIN PULLER	4	1682	100.0	0	0.0	0	0.0
148	TRIMMER OPERATOR	1	1670	90.0	1669	10.0	0	0.0
148	TRIMMER OPERATOR	1	1670	10.0	1669	10.0	1630	80.0
144	LUMBER DIVERTER	1	1630	80.0	1621	20.0	0	0.0
140	RESAW OPERATOR	1	1647	85.0	1646	15.0	0	0.0
136	HOG OPERATOR	1	1000	50.0	1790	50.0	0	0.0
137	CHIPPER OPERATOR	1	1784	50.0	1753	50.0	0	0.0
134	EDGER OPERATOR	1	1636	90.0	1635	10.0	0	0.0
127	TAIL SAWYER	1	1623	85.0	1622	15.0	0	0.0
123	SAWYER	1	1623	85.0	1622	15.0	0	0.0
114	DEBARKER OPERATOR	1	1603	75.0	1619	15.0	1602	5.0
			1616	5.0	0	0.0	0	0.0
111	LOG CARRIER OPER	1	1600	100.0	0	0.0	0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                         PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  242               PLANT NO. =  5               NO DATES SPECIFIED

 JOB       JOB DESCRIPTION            NO. OF    EQUIP.    NOR. MEAN     NOR. STD.
CODE                                  PERS.     CODE     TIME-8HRS     DEVIATION

26500     LABORER                        1      1000        1.6           0.0
                                                1740        6.4           0.0

26100     CLEAN-UP MAN/REGULAR           1      1000        4.0           0.0
                                                1700        1.6           0.0
                                                1680        0.8           0.0
                                                1740        0.8           0.0
                                                1689        0.8           0.0

22800     ELECTRICIANS                   1      1000        4.0           0.0
                                                1630        2.4           0.0
                                                1645        0.8           0.0
                                                1621        0.8           0.0

21100     MILLWRIGHT/GENERAL             2      1881        4.0           0.0
                                                1630        2.4           0.0
                                                1645        0.8           0.0
                                                1621        0.8           0.0

20200     FORKLIFT OPERATOR              5      1802        4.6           1.31
                                                1000        3.4           1.31

20100     LUMBER CARRIER OPER            1      1810        2.8           0.0
                                                1000        5.2           0.0

18200     TALLYMEN                       1      1695        6.4           0.0
                                                1665        1.6           0.0

17600     DRY CHAIN PULLER               4      1742        6.4           0.0
                                                1665        1.6           0.0

17300     GRADER/PLANER MILL             2      1716        8.0           0.0

16800     PLANER SET-UP MAN              1      1702        1.6           0.0
                                                1700        4.4           0.0
                                                1881        2.0           0.0
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242   PLANT NO. = 5   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
16700	PLANER OPERATOR	1	1711	7.6	0.0
			1710	0.4	0.0
16300	GRADER/SORTING CHAIN	1	1682	6.4	0.0
			1689	1.6	0.0
16200	UNSTACKER PULLER	3	1692	3.2	0.0
			1740	4.8	0.0
16100	UNSTACKER-DRY	1	1692	3.2	0.0
			1740	4.8	0.0
16000	KILN OPERATOR	1	1686	6.4	0.0
			1000	1.6	[illegible]
15500	STICKERMAN-GREEN	1	1691	2.0	0.0
			1689	6.0	0.0
15400	STACKER-GREEN	1	1690	8.0	0.0
15100	GREEN CHAIN PULLER	4	1682	8.0	0.0
14801	TRIMMER OPERATOR	1	1670	0.8	0.0
			1669	0.8	0.0
			1630	6.4	0.0
14800	TRIMMER OPERATOR	1	1670	7.2	0.0
			1669	0.8	0.0
14400	LUMBER DIVERTER	1	1630	6.4	0.0
			1621	1.6	0.0
14000	RESAW OPERATOR	1	1647	6.8	0.0
			1646	1.2	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13800	HOG OPERATOR	1	1000	4.0	0.0
			1790	4.0	0.0
13700	CHIPPER OPERATOR	1	1784	4.0	0.0
			1783	4.0	0.0
13400	EDGER OPERATOR	1	1636	7.2	0.0
			1635	0.8	0.0
12700	TAIL SAWYER	1	1623	6.8	0.0
			1622	1.2	0.0
12300	SAWYER	1	1623	6.8	0.0
			1622	1.2	0.0
11400	DEBARKER OPERATOR	1	1603	6.0	0.0
			1619	1.2	0.0
			1602	0.4	0.0
			1618	0.4	0.0
11100	LOG CARRIER OPER	1	1000	8.0	0.0

PLANT NO. 6

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT EQUIPMENT DATA

SIC CODE: 242 PLANT NO: 6 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1831	GANG SAW	79.0
1830	GANG SAW	74.0
1802	FORKLIFT	85.0
1802	FORKLIFT	85.0
1786	HOG/ENCL	94.0
1787	HOG/ENCL	91.0
1784	CHIPPER	97.0
1784	CHIPPER	104.0
1783	CHIPPER	92.0
1783	CHIPPER	90.0
1776	CONVEYOR	91.0
1776	CONVEYOR	87.0
1776	CONVEYOR	83.0
1752	STACK BANDER	83.0
1751	STACK BANDER	83.0
1742	DRY CHAIN CONVEYR	87.0
1742	DRY CHAIN CONVEYR	87.0
1742	DRY CHAIN CONVEYR	89.0
1716	PLANER/ENCL	92.0
1716	PLANER/ENCL	91.0
1711	PLANER/ENCL	90.0
1711	PLANER/ENCL	95.0
1710	PLANER/ENCL	91.5
1702	PLANER	113.0
1696	KILN CHAIN CONVYR	85.0
1695	KILN CHAIN CONVYR	85.0
1693	KILN CHAIN CONVYR	78.0
1693	KILN CHAIN CONVYR	82.0
1692	KILN CHAIN CONVYR	95.0
1692	KILN CHAIN CONVYR	85.0
1691	KILN CHAIN CONVYR	79.0
1691	KILN CHAIN CONVYR	92.0
1690	KILN CHAIN CONVYR	80.0
1690	KILN CHAIN CONVYR	90.0
1687	KILN	80.0
1686	BACK/KILN&CNTL RM	83.7
1682	GREEN CHAIN CONVY	86.5
1680	BACK/GREEN CHAIN	83.1
1670	TRIMMER	83.0

```
ENVIRONMENTAL PROTECTION AGENCY                                   GEN JOB NO.   90

                    INPUT EQUIPMENT DATA

SIC CODE:  242                    PLANT NO:  6                       DATE: 198

EQUIP.         GENERIC NAME                LEQ
 CODE                                      DBA

 1670          TRIMMER                     92.0
 1669          TRIMMER                     90.0
 1669          TRIMMER                     83.0
 1659          RESAW-LARGE                 74.0
 1658          RESAW-LARGE                 74.0
 1638          EDGER                       82.0
 1637          EDGER                       75.0
 1627          HEADRIG                    101.0
 1626          HEADRIG                     95.0
 1623          HEADRIG                     84.0
 1622          HEADRIG                     80.0
 1617          CUT-OFF SAW                 80.0
 1616          CUT-OFF SAW                 79.0
 1603          DEBARKER                    78.0
 1602          DEBARKER                    75.0
```

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   4635

                              INPUT BACKGROUND DATA

SIC CODE:  242                       PLANT NO:  6                       DATE: 1980

BACK.  GENERAL NAME              LEQ    EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                             DBA    CODE CONTR.   CODE CONTR.   CODE CONTR.

1881   BACK/FILEROOM             82.0   1831   0.60   1623   0.40      0   0.0
1881   BACK/FILEROOM             80.0   1702   1.00      0   0.0       0   0.0
1873   BACK/MACHINE SHOP         79.0   1776   0.60   1638   0.40      0   0.0
1871   BACK/BASEMENT             84.0   1776   0.80   1670   0.20      0   0.0
1871   BACK/BASEMENT             83.0   1776   0.60   1831   0.20   1623   0.20
1829   BACK/GANG SAW             99.0   1831   0.80   1658   0.20      0   0.0
1760   BACK/CHIPPER              95.0   1784   0.70   1776   0.30      0   0.0
1740   BACK/DRY CHAIN            85.0   1742   0.80   1711   0.20      0   0.0
1700   BACK/PLANER               91.0   1702   0.60   1670   0.40      0   0.0
1689   BACK/KILN CHAIN           78.0   1693   0.70   1692   0.30      0   0.0
1665   BACK/TRIMMER              89.0   1670   0.50   1702   0.30   1711   0.20
1665   BACK/TRIMMER              99.0   1670   1.00      0   0.0       0   0.0
1630   BACK/EDGER                92.0   1638   0.50   1776   0.40   1670   0.10
1621   BACK/HEADRIG              93.0   1623   0.80   1831   0.20      0   0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	1	113.0	0.0
1627	HEADRIG	1	101.0	0.0
1784	CHIPPER	2	100.5	4.95
1829	BACK/GANG SAW	1	99.0	0.0
1626	HEADRIG	1	95.0	0.0
1780	BACK/CHIPPER	1	95.0	0.0
1665	BACK/TRIMMER	2	94.0	7.07
1788	HOG/ENCL	1	94.0	0.0
1621	BACK/HEADRIG	1	93.0	0.0
1711	PLANER/ENCL	2	92.5	3.54
1630	BACK/EDGER	1	92.0	0.0
1716	PLANER/ENCL	2	91.5	0.71
1710	PLANER/ENCL	1	91.3	0.0
1700	BACK/PLANER	1	91.0	0.0
1783	CHIPPER	2	91.0	1.[illegible]
1787	HOG/ENCL	1	91.0	0.0
1692	KILN CHAIN CONVYR	2	90.0	7.07
1742	DRY CHAIN CONVEYR	3	87.7	1.15
1670	TRIMMER	2	87.5	6.36
1669	TRIMMER	2	86.5	4.95
1682	GREEN CHAIN CONVY	1	86.5	0.0
1691	KILN CHAIN CONVYR	2	85.5	9.19
1690	KILN CHAIN CONVYR	2	85.0	7.07
1695	KILN CHAIN CONVYR	1	85.0	0.0
1696	KILN CHAIN CONVYR	1	85.0	0.0
1740	BACK/DRY CHAIN	1	85.0	0.0
1802	FORKLIFT	2	85.0	0.0
1623	HEADRIG	1	84.0	0.0
1686	BACK/KILN&CNTL RM	1	83.7	0.0
1871	BACK/BASEMENT	2	83.5	0.71
1680	BACK/GREEN CHAIN	1	83.1	0.0
1751	STACK BANDER	1	83.0	0.0
1752	STACK BANDER	1	83.0	0.0
1638	EDGER	1	82.0	0.0
1881	BACK/FILEROOM	2	81.0	1.41
1617	CUT-OFF SAW	1	80.0	0.0
1622	HEADRIG	1	80.0	0.0
1687	KILN	1	80.0	0.0
1693	KILN CHAIN CONVYR	2	80.0	2.83
1616	CUT-OFF SAW	1	79.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	1	113.0	0.0
1627	HEADRIG	1	101.0	0.0
1784	CHIPPER	2	100.5	4.95
1829	BACK/GANG SAW	1	99.0	0.0
1626	HEADRIG	1	95.0	0.0
1780	BACK/CHIPPER	1	95.0	0.0
1665	BACK/TRIMMER	2	94.0	7.07
1788	HOG/ENCL	1	94.0	0.0
1621	BACK/HEADRIG	1	93.0	0.0
1711	PLANER/ENCL	2	92.5	3.54
1630	BACK/EDGER	1	92.0	0.0
1716	PLANER/ENCL	2	91.5	0.71
1710	PLANER/ENCL	1	91.3	0.0
1700	BACK/PLANER	1	91.0	0.0
1783	CHIPPER	2	91.0	1.41
1787	HOG/ENCL	1	91.0	0.0
1692	KILN CHAIN CONVYR	2	90.0	7.07
1742	DRY CHAIN CONVEYR	3	87.7	1.15
1670	TRIMMER	2	87.5	6.36
1776	CONVEYOR	3	87.0	4.00
1669	TRIMMER	2	86.5	4.95
1682	GREEN CHAIN CONVY	1	86.5	0.0
1691	KILN CHAIN CONVYR	2	85.5	9.19
1690	KILN CHAIN CONVYR	2	85.0	7.07
1695	KILN CHAIN CONVYR	1	85.0	0.0
1696	KILN CHAIN CONVYR	1	85.0	0.0
1740	BACK/DRY CHAIN	1	85.0	0.0
1802	FORKLIFT	2	85.0	0.0
1623	HEADRIG	1	84.0	0.0
1686	BACK/KILN&CNTL RM	1	83.7	0.0
1871	BACK/BASEMENT	2	83.5	0.71
1680	BACK/GREEN CHAIN	1	83.1	0.0
1751	STACK BANDER	1	83.0	0.0
1752	STACK BANDER	1	83.0	0.0
1638	EDGER	1	82.0	0.0
1881	BACK/FILEROOM	2	81.0	1.41
1617	CUT-OFF SAW	1	80.0	0.0
1622	HEADRIG	1	80.0	0.0
1687	KILN	1	80.0	0.0
1693	KILN CHAIN CONVYR	2	80.0	2.83

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1616	CUT-OFF SAW	1	79.0	0.0
1831	GANG SAW	1	79.0	0.0
1873	BACK/MACHINE SHOP	1	79.0	0.0
1603	DEBARKER	1	78.0	0.0
1689	BACK/KILN CHAIN	1	78.0	0.0
1602	DEBARKER	1	75.0	0.0
1637	EDGER	1	75.0	0.0
1658	RESAW-LARGE	1	74.0	0.0
1659	RESAW-LARGE	1	74.0	0.0
1830	GANG SAW	1	74.0	0.0

```
ENVIRONMENTAL PROTECTION AGENCY
                                                                BBN JOB NO.   9635
                  BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE =  242                  PLANT NO. =  5              NO DATES SPECIFIED

EQUIP.         GENERIC NAME                 NO. OF         MEAN          STD.
 CODE                                       SAMPLES      LEQ(DBA)        DEV.

 1831       GANG SAW                           1           79.0          0.0
 1873       BACK/MACHINE SHOP                  1           79.0          0.0
 1603       DEBARKER                           1           78.0          0.0
 1689       BACK/KILN CHAIN                    1           78.0          0.0
 1602       DEBARKER                           1           75.0          0.0
 1637       EDGER                              1           75.0          0.0
 1658       RESAW-LARGE                        1           74.0          0.0
 1659       RESAW-LARGE                        1           74.0          0.0
 1830       GANG SAW                           1           74.0          0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1779	CHIPPER	4	95.8	3.64
1699	PLANER	6	95.4	2.55
1785	HOG	2	92.5	0.0
1620	HEADRIG	4	90.0	0.0
1739	DRY CHAIN	3	87.7	1.15
1776	CONVEYOR/GEN	3	87.0	4.00
1664	TRIMMER	4	87.0	5.70
1686	KILN CHAIN	10	85.1	6.94
1800	FORKLIFT	2	85.0	0.0
1679	GREEN CHAIN	2	84.8	0.0
1749	STACK BANDER	2	83.0	0.0
1685	KILN	2	81.5	0.0
1610	CUT-OFF	2	79.5	0.0
1629	EDGER	2	78.5	0.0
1828	GANG SAW	2	76.5	0.
1600	DEBARKER	2	76.5	0.
1644	RESAW/LARGE	2	74.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1779	CHIPPER	4	95.8	3.64
1699	PLANER	6	95.4	2.55
1785	HOG	2	92.5	0.0
1620	HEADRIG	4	90.0	0.0
1739	DRY CHAIN	3	87.7	1.15
1776	CONVEYOR/GEN	3	87.0	4.00
1664	TRIMMER	4	87.0	5.70
1688	KILN CHAIN	10	85.1	6.94
1800	FORKLIFT	2	85.0	0.0
1679	GREEN CHAIN	2	84.8	0.0
1749	STACK BANDER	2	83.0	0.0
1685	KILN	2	81.8	0.0
1610	CUT-OFF	2	79.5	0.0
1629	EDGER	2	78.5	0.0
1828	GANG SAW	2	76.5	0.0
1600	DEBARKER	2	76.5	0.0
1644	RESAW/LARGE	2	74.0	0.0
1882	MECHANIC SHOP/GARAGE	0	0.0	0.0
1880	FILEROOM	0	0.0	0.0
1878	PIPE SHOP	0	0.0	0.0
1876	ELECTRIC SHOP	0	0.0	0.0
1874	CARPENTRY SHOP	0	0.0	0.0
1872	MACHINE SHOP	0	0.0	0.0
1870	BASEMENT	0	0.0	0.0
1868	STORAGE	0	0.0	0.0
1848	RIP SAW/SPECIALTY	0	0.0	0.0
1819	QUADSAW	0	0.0	0.0
1813	TRANSFER CARRIER	0	0.0	0.0
1810	LUMBER CARRIER	0	0.0	0.0
1808	LOG CARRIER	0	0.0	0.0
1798	SAWMILL OFFICE	0	0.0	0.0
1792	POWERHOUSE	0	0.0	0.0
1759	RESAW/SPECIALTY	0	0.0	0.0
1747	RAIL CAR LOAD	0	0.0	0.0
1724	MOULDER	0	0.0	0.0

```
ENVIRONMENTAL PROTECTION AGENCY
                                                                OSN JOB NO.   905

                         INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242
                                 PLANT NO:  6
                                                                DATE: 1985
 JOB    JOB DESCRIPTION             NO OF      TIME SPENT USING EQUIPMENT CODE
CODE                                PERS.  CODE  TIME  CODE  TIME  CODE  TIME

 266    HELPER
                                       1   1000 100.0     0   0.0     0   0.0
 266    HELPER
                                       2   1629  20.0  1621  20.0  1665  20.0
                                           1630  20.0  1671  20.0     0   0.0
 266    HELPER
                                       1   1000  20.0  1629  20.0  1621  20.0
                                           1665  20.0  1630  20.0     0   0.0
 265    LABORER
                                       2   1000 100.0     0   0.0     0   0.0
 265    LABORER
                                       2   1629  20.0  1621  20.0  1665  20.0
                                           1630  20.0  1671  20.0     0   0.0
 245    OILER
                                       2   1629  20.0  1621  20.0  1665  20.0
                                           1630  20.0  1700  20.0     0   0.0
 244    FILERS
                                       3   1681 100.0     0   0.0     0   0.0
 233    CARPENTERS
                                       1   1000  20.0  1629  20.0  1621  20.0
                                           1665  20.0  1630  20.0     0   0.0
 228    ELECTRICIANS
                                       2   1000  20.0  1629  20.0  1621  20.0
                                           1665  20.0  1630  20.0     0   0.0
 219    MACHINISTS
                                       1   1673 100.0     0   0.0     0   0.0
 217    WELDER
                                       1   1000 100.0     0   0.0     0   0.0
 211    MILLWRIGHT/GENERAL
                                       4   1629  20.0  1621  20.0  1665  20.0
                                           1700  20.0  1630  20.0     0   0.0
 202    FORKLIFT OPERATOR
                                       7   1602 100.0     0   0.0     0   0.0
 182    TALLYMEN
                                       3   1000 100.0     0   0.0     0   0.0
 182    TALLYMEN
                                       2   1695 100.0     0   0.0     0   0.0
 179    BANDER OPERATOR
                                       2   1752  40.0  1700  20.0  1669  20.0
                                           1665  20.0     0   0.0     0   0.0
```

ENVIRONMENTAL PROTECTION AGENCY GBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242 PLANT NO: 6 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
176	DRY CHAIN PULLER	6	1693	100.0	0	0.0	0	0.0
173	GRADER/PLANER MILL	4	1716	100.0	0	0.0	0	0.0
168	PLANER SET-UP MAN	2	1681	85.0	1000	10.0	1702	5.0
167	PLANER OPERATOR	4	1711	90.0	1710	5.0	1000	5.0
163	GRADER/SORTING CHAIN	2	1692	100.0	0	0.0	0	0.0
162	UNSTACKER PULLER	6	1693	100.0	0	0.0	0	0.0
161	UNSTACKER-DRY	2	1692	100.0	0	0.0	0	0.0
160	KILN OPERATOR	2	1502	70.0	1000	20.0	1622	10.0
155	STICKERMAN-GREEN	2	1691	80.0	1630	20.0	0	0.0
154	STACKER-GREEN	2	1690	80.0	1660	20.0	0	0.0
148	TRIMMER OPERATOR	2	1670	90.0	1669	10.0	0	0.0
146	TRIMMER OPERATOR	2	1570	85.0	1669	15.0	0	0.0
145	GREEN CHAIN OPERATOR	2	1662	70.0	1000	30.0	0	0.0
138	HOG OPERATOR	2	1788	50.0	1787	50.0	0	0.0
137	CHIPPER OPERATOR	2	1784	60.0	1783	40.0	0	0.0
134	EDGER OPERATOR	2	1638	90.0	1637	10.0	0	0.0
131	GANG SAW OPERATOR	2	1631	95.0	1630	5.0	0	0.0
127	TAIL SAWYER	2	1627	95.0	1626	5.0	0	0.0
123	SAWYER	2	1623	95.0	1622	5.0	0	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                                GEN JOB NO.   963

                          INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242                      PLANT NO:  6                        DATE: 1980

 JOB    JOB DESCRIPTION             NO OF    TIME SPENT USING EQUIPMENT CODE
CODE                                PERS.  CODE  TIME  CODE  TIME  CODE  TIME

 114    DEBARKER OPERATOR               2  1600  10.0  1603  75.0  1602  10.0
                                           1617   5.0     0   0.0     0   0.0
```

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26602	HELPER	1	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
26601	HELPER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1871	1.6	0.0
26600	HELPER	1	1000	8.0	0.0
26501	LABORER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1871	1.6	0.0
26500	LABORER	2	1000	8.0	0.0
24500	OILER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
24400	FILERS	3	1881	8.0	0.0
23300	CARPENTERS	1	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
22800	ELECTRICIANS	2	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
21900	MACHINISTS	1	1873	8.0	0.0
21700	WELDER	1	1000	8.0	0.0
21100	MILLWRIGHT/GENERAL	4	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1700	1.6	0.0
			1630	1.6	0.0
20200	FORKLIFT OPERATOR	7	1602	8.0	0.0
18201	TALLYMEN	2	1695	8.0	0.0
18200	TALLYMEN	3	1000	8.0	0.0
17900	BANDER OPERATOR	2	1752	3.2	0.0
			1700	1.6	0.0
			1689	1.6	0.0
			1665	1.6	0.0
17600	DRY CHAIN PULLER	6	1693	8.0	0.0
17300	GRADER/PLANER MILL	4	1716	8.0	0.0
16800	PLANER SET-UP MAN	2	1881	6.8	0.0
			1000	0.8	0.0
			1702	0.4	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
16700	PLANER OPERATOR	4	1711	7.2	0.0
			1710	0.4	0.0
			1000	0.4	0.0
16300	GRADER/SORTING CHAIN	2	1692	8.0	0.0
16200	UNSTACKER PULLER	6	1693	8.0	0.0
16100	UNSTACKER-DRY	2	1692	8.0	0.0
16000	KILN OPERATOR	2	1802	5.6	0.0
			1000	1.6	0.0
			1686	0.8	0.0
15500	STICKERMAN-GREEN	2	1691	6.4	0.0
			1680	1.6	0.0
15400	STACKER-GREEN	2	1690	6.4	0.0
			1680	1.6	0.0
14800	TRIMMER OPERATOR	4	1670	7.0	0.23
			1669	1.0	0.23
14500	GREEN CHAIN OPERATOR	2	1682	5.6	0.0
			1000	2.4	0.0
13800	HOG OPERATOR	2	1786	4.0	0.0
			1787	4.0	0.0
13700	CHIPPER OPERATOR	2	1784	4.8	0.0
			1783	3.2	0.0
13400	EDGER OPERATOR	2	1638	7.2	0.0
			1637	0.8	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13100	GANG SAW OPERATOR	2	1831	7.6	0.0
			1830	0.4	0.0
12700	TAIL SAWYER	2	1627	7.6	0.0
			1626	0.4	0.0
12300	SAWYER	2	1623	7.6	0.0
			1622	0.4	0.0
11400	DEBARKER OPERATOR	2	1000	0.8	0.0
			1603	6.0	0.0
			1602	0.8	0.0
			1617	0.4	0

PLANT NO. 7

```
ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9835

            INPUT EQUIPMENT DATA

SIC CODE:  242                    PLANT NO:  7                    DATE: 1980

EQUIP.         GENERIC NAME              LEQ
 CODE                                    DBA

 1815          TRANSFER CARRIER        102.0
 1810          LUMBER CARRIER           88.0
 1810          LUMBER CARRIER           86.0
 1802          FORKLIFT                 86.0
 1790          HOG                      94.0
 1789          HOG                      90.0
 1788          HOG/ENCL                 96.0
 1787          HOG/ENCL                 91.0
 1784          CHIPPER                 103.1
 1782          CHIPPER/ENCL             96.0
 1766          RESAW-SPECIALTY          91.0
 1764          RESAW-SPECIALTY          93.0
 1742          DRY CHAIN CONVEYR        87.0
 1742          DRY CHAIN CONVEYR        88.0
 1742          DRY CHAIN CONVEYR        86.0
 1742          DRY CHAIN CONVEYR        83.0
 1742          DRY CHAIN CONVEYR        83.0
 1716          PLANER/ENCL              90.0
 1716          PLANER/ENCL              93.0
 1716          PLANER/ENCL              90.0
 1711          PLANER/ENCL              91.0
 1711          PLANER/ENCL              95.0
 1711          PLANER/ENCL              93.0
 1711          PLANER/ENCL              99.0
 1710          PLANER/ENCL              91.3
 1702          PLANER                  116.0
 1702          PLANER                  117.0
 1696          KILN CHAIN CONVYR        95.0
 1695          KILN CHAIN CONVYR        58.0
 1693          KILN CHAIN CONVYR        56.0
 1691          KILN CHAIN CONVYR        92.0
 1691          KILN CHAIN CONVYR        87.0
 1691          KILN CHAIN CONVYR        70.0
 1691          KILN CHAIN CONVYR        80.0
 1690          KILN CHAIN CONVYR        91.0
 1690          KILN CHAIN CONVYR        86.0
 1690          KILN CHAIN CONVYR        72.0
 1690          KILN CHAIN CONVYR        85.0
 1687          KILN                     91.0
```

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                   INPUT EQUIPMENT DATA

SIC CODE:  242                     PLANT NO:  7                DATE: 1980

EQUIP.       GENERIC NAME              LEQ
 CODE                                  DBA

 1687        KILN                      80.0
 1682        GREEN CHAIN CONVY         88.0
 1682        GREEN CHAIN CONVY         92.0
 1682        GREEN CHAIN CONVY         95.0
 1680        BACK/GREEN CHAIN          83.1
 1672        TRIMMER                   96.0
 1671        TRIMMER                   91.0
 1670        TRIMMER                   72.0
 1669        TRIMMER                   90.0
 1669        TRIMMER                   70.0
 1647        RESAW-LARGE               91.0
 1646        RESAW-LARGE               87.0
 1638        EDGER                     82.0
 1636        EDGER                     79.0
 1637        EDGER                     77.0
 1637        EDGER                     80.0
 1636        EDGER                     95.5
 1635        EDGER                     88.5
 1623        HEADRIG                   82.0
 1623        HEADRIG                   84.0
 1622        HEADRIG                   76.0
 1622        HEADRIG                   80.0
 1613        CUT-OFF SAW               97.0
 1612        CUT-OFF SAW               83.0
 1603        DEBARKER                  73.0
 1602        DEBARKER                  72.0
```

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ENVIRONMENTAL PROTECTION AGENCY
                                                               BBN JOB NO.   9635

                              INPUT BACKGROUND DATA

SIC CODE:  242                    PLANT NO:  7                   DATE: 1980

BACK. GENERAL NAME                LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                              DBA   CODE CONTR.   CODE CONTR.   CODE CONTR.

1883  BACK/MECHANIC SHP           70.0  1000  1.00       0  0.0        0  0.0
1881  BACK/FILEROOM               76.0  1623  1.00       0  0.0        0  0.0
1873  BACK/MACHINE SHOP           78.0  1000  0.80    1802  0.20       0  0.0
1871  BACK/BASEMENT               89.0  1647  0.50    1764  0.20    1636  0.30
1871  BACK/BASEMENT               91.0  1776  0.60    1623  0.40       0  0.0
1760  BACK/SPEC RESAW             90.0  1764  0.80    1711  0.20       0  0.0
1740  BACK/DRY CHAIN              85.0  1693  0.50    1764  0.20    1711  0.30
1700  BACK/PLANER                 92.0  1711  0.60    1764  0.40       0  0.0
1689  BACK/KILN CHAIN             85.0  1670  0.70    1693  0.20    1810  0.10
1665  BACK/TRIMMER                90.0  1670  0.80    1711  0.20       0  0.0
1665  BACK/TRIMMER                94.0  1670  0.60    1636  0.40       0  0.0
1645  BACK/RESAW                  96.0  1647  0.60    1623  0.40       0  0.0
1621  BACK/HEADRIG                94.0  1623  1.00       0  0.0        0  0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	2	116.5	0.71
1784	CHIPPER	1	103.1	0.0
1815	TRANSFER CARRIER	1	102.0	0.0
1613	CUT-OFF SAW	1	97.0	0.0
1645	BACK/RESAW	1	96.0	0.0
1672	TRIMMER	1	96.0	0.0
1782	CHIPPER/ENCL	1	96.0	0.0
1788	HOG/ENCL	1	96.0	0.0
1636	EDGER	1	95.5	0.0
1696	KILN CHAIN CONVYR	1	95.0	0.0
1711	PLANER/ENCL	4	94.5	3.42
1621	BACK/HEADRIG	1	94.0	0.0
1790	HOG	1	94.0	0.0
1764	RESAW-SPECIALTY	1	93.0	0.0
1665	BACK/TRIMMER	2	92.0	2.[illegible]
1700	BACK/PLANER	1	92.0	0.[illegible]
1682	GREEN CHAIN CONVY	3	91.7	3.51
1710	PLANER/ENCL	1	91.3	0.0
1647	RESAW-LARGE	1	91.0	0.0
1671	TRIMMER	1	91.0	0.0
1716	PLANER/ENCL	3	91.0	1.73
1768	RESAW-SPECIALTY	1	91.0	0.0
1787	HOG/ENCL	1	91.0	0.0
1760	BACK/SPEC RESAW	1	90.0	0.0
1789	HOG	1	90.0	0.0
1871	BACK/BASEMENT	2	90.0	1.41
1635	EDGER	1	88.5	0.0
1695	KILN CHAIN CONVYR	1	88.0	0.0
1646	RESAW-LARGE	1	87.0	0.0
1802	FORKLIFT	1	86.6	0.0
1742	DRY CHAIN CONVEYR	5	86.4	2.07
1693	KILN CHAIN CONVYR	1	86.0	0.0
1687	KILN	2	85.5	7.78
1689	BACK/KILN CHAIN	1	85.0	0.0
1740	BACK/DRY CHAIN	1	85.0	0.0
1690	KILN CHAIN CONVYR	4	83.5	8.10
1680	BACK/GREEN CHAIN	1	83.1	0.0
1612	CUT-OFF SAW	1	83.0	0.0
1623	HEADRIG	2	83.0	1.41
1691	KILN CHAIN CONVYR	4	82.3	9.54

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1636	EDGER	2	80.5	2.12
1669	TRIMMER	2	80.0	14.14
1622	HEADRIG	2	79.0	1.41
1637	EDGER	2	78.5	2.12
1873	BACK/MACHINE SHOP	1	78.0	0.0
1816	TRANSFER CARRIER	1	76.0	0.0
1881	BACK/FILEROOM	1	76.0	0.0
1603	DEBARKER	1	73.0	0.0
1602	DEBARKER	1	72.0	0.0
1670	TRIMMER	1	72.0	0.0
1883	BACK/MECHANIC SHP	1	70.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                      BBN JOB NO.   963

              EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE =  242            PLANT NO. =  7           NO DATES SPECIFIE

EQUIP.        GENERIC NAME              NO. OF          MEAN         STD.
 CODE                                   SAMPLES       LEQ(DBA)       DEV.

 1779       CHIPPER                         2           99.6         0.0
 1699       PLANER                         10           97.5         2.63
 1785       HOG                             4           92.8         0.0
 1759       RESAW/SPECIALTY                 2           92.0         0.0
 1610       CUT-OFF                         2           90.0         0.0
 1679       GREEN CHAIN                     4           89.5         3.51
 1813       TRANSFER CARRIER                2           89.0         0.0
 1644       RESAW/LARGE                     2           89.0         0.0
 1810       LUMBER CARRIER                  2           88.0         0.0
 1800       FORKLIFT                        1           86.6         0.0
 1739       DRY CHAIN                       5           86.4         2.07
 1685       KILN                            2           85.5         7.78
 1776       CONVEYOR/GEN                    2           84.8         1.41
 1688       KILN CHAIN                     11           84.7         8.[illegible]
 1664       TRIMMER                         5           83.8        14.[illegible]
 1629       EDGER                           6           83.7         2.12
 1620       HEADRIG                         4           81.0         1.41
 1600       DEBARKER                        2           72.5         0.0
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ENVIRONMENTAL PROTECTION AGENCY                              DBN JOB NO.   95[illegible]

                         INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242                   PLANT NO:  7                         DATE: 1980

 JOB   JOB DESCRIPTION             NO OF     TIME SPENT USING EQUIPMENT CODE
CODE                               PERS.  CODE  TIME  CODE  TIME  CODE  TIME

 266   HELPER                         6   1802  50.0  1000  50.0     0   0.0

 228   ELECTRICIANS                  30   1000  50.0  1621  20.0  1700  20.0
                                          1665  10.0     0   0.0     0   0.0

 223   MECHANICS                     10   1000 100.0     0   0.0     0   0.0

 219   MACHINISTS                     8   1673  40.0  1000  60.0     0   0.0

 211   MILLWRIGHT/GENERAL            40   1000  50.0  1621  20.0  1700  20.0
                                          1665  10.0     0   0.0     0   0.0

 202   FORKLIFT OPERATOR              7   1802  70.0  1000  30.0     0   0.0

 201   LUMBER CARRIER OPER            7   1610  70.0  1000  30.0     0   0.0

 191   SPECIALTY RESAW OFFB           1   1764  50.0  1700  35.0  1740  15.0

 190   SPECIALTY RESAW OPER           1   1764  50.0  1700  35.0  1740  15.0

 182   TALLYMEN                       4   1689 100.0     0   0.0     0   0.0

 176   DRY CHAIN PULLER               8   1693 100.0     0   0.0     0.  0.0

 176   DRY CHAIN PULLER              10   1742 100.0     0   0.0     0   0.0

 173   GRADER/PLANER MILL             9   1689 100.0     0   0.0     0   0.0

 168   PLANER SET-UP MAN              2   1711  45.0  1702   5.0  1681  50.0

 167   PLANER OPERATOR                2   1711  95.0  1710   5.0     0   0.0

 159   TRANSFER OPERATOR              3   1587  20.0  1515  70.0  1616  10.0

 155   STICKERMAN-GREEN               4   1691  80.0  1689  20.0     0   0.0

 154   STACKER-GREEN                  4   1690  80.0  1689  20.0     0   0.0
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ENVIRONMENTAL PROTECTION AGENCY                              SBN JOB NO.   963

                        INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242                    PLANT NO:  7                        DATE: 1980

 JOB    JOB DESCRIPTION          NO OF     TIME SPENT USING EQUIPMENT CODE
CODE                             PERS.  CODE   TIME   CODE   TIME   CODE   TIME

 148    TRIMMER OPERATOR             2  1670   90.0   1669   10.0      0    0.0

 148    TRIMMER OPERATOR             2  1670   95.0   1669    5.0      0    0.0

 143    UNSCRAMBLE OPERATOR          2  1682   90.0   1680   10.0      0    0.0

 140    RESAW OPERATOR               2  1647   85.0   1646   15.0      0    0.0

 138    HOG OPERATOR                 1  1767   15.0   1766   15.0   1621   20.0
                                        1665   20.0   1671   30.0      0    0.0

 138    HOG OPERATOR                 2  1671   50.0   1790   25.0   1764   25.0

 134    EDGER OPERATOR               4  1635   85.0   1633   15.0      0    0.0

 123    SAWYER                       4  1623   80.0   1622   20.0      0    0.0

 120    CUT-OFF SAW OPERATOR         2  1613   10.0   1612   90.0      0    0.0

 114    DEBARKER OPERATOR            2  1603   80.0   1602   20.0      0    0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26600	HELPER	6	1802	4.0	0.0
			1000	4.0	0.0
22800	ELECTRICIANS	30	1000	4.0	0.0
			1621	1.6	0.0
			1700	1.6	0.0
			1665	0.8	0.0
22300	MECHANICS	10	1000	8.0	0.0
21900	MACHINISTS	8	1873	3.2	0.0
			1000	4.8	0.0
21100	MILLWRIGHT/GENERAL	40	1000	4.0	0.0
			1621	1.6	0.0
			1700	1.6	0.0
			1665	0.8	0.0
20200	FORKLIFT OPERATOR	7	1802	5.6	0.0
			1000	2.4	0.0
20100	LUMBER CARRIER OPER	7	1810	5.6	0.0
			1000	2.4	0.0
19100	SPECIALTY RESAW OFFB	1	1764	4.0	0.0
			1700	2.8	0.0
			1740	1.2	0.0
19000	SPECIALTY RESAW OPER	1	1764	4.0	0.0
			1700	2.8	0.0
			1740	1.2	0.0
18200	TALLYMEN	4	1689	8.0	0.0
17601	DRY CHAIN PULLER	10	1742	8.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WGR. MEAN TIME-8HRS	WOR. STD. DEVIATION
17600	DRY CHAIN PULLER	8	1693	8.0	0.0
17300	GRADER/PLANER MILL	9	1689	8.0	0.0
16800	PLANER SET-UP MAN	2	1711	3.6	0.0
			1702	0.4	0.0
			1881	4.0	0.0
16700	PLANER OPERATOR	2	1711	7.6	0.0
			1710	0.4	0.0
15900	TRANSFER OPERATOR	3	1687	1.6	0.0
			1815	5.6	0.0
			1816	0.8	0[illegible]
15500	STICKERMAN-GREEN	4	1691	6.4	0.0
			1689	1.6	0.0
15400	STACKER-GREEN	4	1690	6.4	0.0
			1689	1.6	0.0
14800	TRIMMER OPERATOR	4	1670	7.4	0.23
			1669	0.6	0.23
14300	UNSCRAMBLE OPERATOR	2	1682	7.2	0.0
			1680	0.8	0.0
14000	RESAW OPERATOR	2	1647	6.8	0.0
			1646	1.2	0.0
13801	HOG OPERATOR	2	1871	4.0	0.0
			1790	2.0	0.0
			1784	2.0	0.0
13800	HOG OPERATOR	1	1787	1.2	0.0
			1788	1.2	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1871	2.4	0.0

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242   PLANT NO. = 7   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13400	EDGER OPERATOR	4	1636	6.8	0.0
			1635	1.2	0.0
12300	SAWYER	4	1623	6.4	0.0
			1622	1.6	0.0
12000	CUT-OFF SAW OPERATOR	2	1613	0.8	0.0
			1612	7.2	0.0
11400	DEBARKER OPERATOR	2	1603	6.4	0.0
			1602	1.6	0.0

PLANT NO. 8

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9835

INPUT EQUIPMENT DATA

SIC CODE: 242 PLANT NO: 8 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1802	FORKLIFT	91.0
1802	FORKLIFT	85.0
1768	RESAW-SPECIALTY	98.0
1768	RESAW-SPECIALTY	97.0
1767	RESAW-SPECIALTY	94.0
1767	RESAW-SPECIALTY	95.0
1764	RESAW-SPECIALTY	101.0
1764	RESAW-SPECIALTY	103.0
1763	RESAW-SPECIALTY	100.0
1763	RESAW-SPECIALTY	100.0
1742	DRY CHAIN CONVEYR	90.0
1742	DRY CHAIN CONVEYR	84.0
1716	PLANER/ENCL	95.0
1716	PLANER/ENCL	97.0
1715	PLANER/ENCL	93.0
1711	PLANER/ENCL	92.0
1711	PLANER/ENCL	98.0
1710	PLANER/ENCL	84.0
1710	PLANER/ENCL	98.0
1702	PLANER	116.0
1702	PLANER	120.0
1695	KILN CHAIN CONVYR	92.0
1694	KILN CHAIN CONVYR	87.0
1694	KILN CHAIN CONVYR	85.0
1694	KILN CHAIN CONVYR	86.0
1694	KILN CHAIN CONVYR	90.0
1694	KILN CHAIN CONVYR	83.0
1694	KILN CHAIN CONVYR	88.0
1693	KILN CHAIN CONVYR	92.0
1693	KILN CHAIN CONVYR	89.0
1691	KILN CHAIN CONVYR	85.4
1690	KILN CHAIN CONVYR	88.4
1687	KILN	85.0
1670	TRIMMER	98.0
1669	TRIMMER	93.0
1669	TRIMMER	90.0

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                              INPUT BACKGROUND DATA

SIC CODE:  242                     PLANT NO:  8                      DATE: 1980

BACK. GENERAL NAME                 LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                               DBA   CODE CONTR.   CODE CONTR.   CODE CONTR.

1760  BACK/SPEC RESAW              91.0  1762  0.60    1702  0.40       0  0.0
1740  BACK/DRY CHAIN               85.0  1742  0.40    1694  0.30    1702  0.30
1700  BACK/PLANER                  89.0  1702  0.70    1711  0.30       0  0.0
1700  BACK/PLANER                  96.0  1702  0.70    1711  0.20    1762  0.10
1689  BACK/KILN CHAIN              80.0  1694  0.70    1776  0.20    1802  0.10
1665  BACK/TRIMMER                 91.0  1670  0.40    1716  0.30    1776  0.30
1665  BACK/TRIMMER                 84.0  1670  0.50    1702  0.30    1742  0.20
1665  BACK/TRIMMER                 91.0  1670  0.40    1702  0.30    1716  0.30
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ENVIRONMENTAL PROTECTION AGENCY
                                                            BBN JOB NO.   9635
          BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)
SIC CODE =  242              PLANT NO. =  6             NO DATES SPECIFIED
EQUIP.        GENERIC NAME
 CODE                                   NO. OF        MEAN         STD.
                                        SAMPLES      LEQ(DBA)      DEV.

 1702       PLANER                         2          118.0        2.83
 1764       RESAW-SPECIALTY                2          102.0        1.41
 1763       RESAW-SPECIALTY                2          100.0        0.0
 1768       RESAW-SPECIALTY                2           96.5        0.71
 1670       TRIMMER                        1           96.0        0.0
 1716       PLANER/ENCL                    2           96.0        1.41
 1711       PLANER/ENCL                    2           95.0        4.24
 1767       RESAW-SPECIALTY                2           94.5        0.71
 1715       PLANER/ENCL                    1           93.0        0.0
 1700       BACK/PLANER                    2           92.5        4.95
 1695       KILN CHAIN CONVYR              1           92.0        0.0
 1669       TRIMMER                        2           91.5        2.12
 1760       BACK/SPEC RESAW                1           91.0        0.0
 1693       KILN CHAIN CONVYR              2           90.5        2.12
 1710       PLANER/ENCL                    2           90.0        8.49
 1762       BACK. ONLY CONTR.              1           88.8        0.0
 1665       BACK/TRIMMER                   3           88.7        4.04
 1802       FORKLIFT                       2           88.0        4.24
 1742       DRY CHAIN CONVEYR              2           87.0        4.24
 1694       KILN CHAIN CONVYR              6           86.8        2.48
 1690       KILN CHAIN CONVYR              1           86.4        0.0
 1691       KILN CHAIN CONVYR              1           85.4        0.0
 1687       KILN                           1           85.0        0.0
 1740       BACK/DRY CHAIN                 1           85.0        0.0
 1689       BACK/KILN CHAIN                1           80.0        0.0
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ENVIRONMENTAL PROTECTION AGENCY                               BBN JOB NO.   963
                EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED
SIC CODE =  242              PLANT NO. =  8              NO DATES SPECIFIE
EQUIP.          GENERIC NAME                 NO. OF         MEAN         STD.
 CODE                                        SAMPLES      LEQ(DBA)       DEV.
 1699          PLANER                           9           99.0         5.00
 1759          RESAW/SPECIALTY                  9           97.2         0.87
 1664          TRIMMER                          3           93.0         2.12
 1800          FORKLIFT                         2           88.0         4.24
 1686          KILN CHAIN                      11           87.8         2.43
 1739          DRY CHAIN                        2           87.0         4.24
 1685          KILN                             1           85.0         0.0
 1776          CONVEYOR/GEN                     1           73.0         0.0
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ENVIRONMENTAL PROTECTION AGENCY

OBM JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 8

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
262	CLEAN-UP MAN/DOWN TM	2	1000	100.0	0	0.0	0	0.0
261	CLEAN-UP MAN/REGULAR	2	1000	10.0	1700	30.0	1760	20.0
			1665	20.0	1689	20.0	0	0.0
223	MECHANICS	2	1000	100.0	0	0.0	0	0.0
219	MACHINISTS	1	1000	100.0	0	0.0	0	0.0
213	MILLWRIGHT/PLANER	1	1700	10.0	1000	75.0	1760	10.0
			1665	5.0	0	0.0	0	0.0
202	FORKLIFT OPERATOR	7	1602	60.0	1000	40.0	0	0.0
201	LUMBER CARRIER OPER	1	1610	60.0	1000	40.0	0	0.0
191	SPECIALTY RESAW OFFB	2	1768	100.0	0	0.0	0	0.0
190	SPECIALTY RESAW OPER	1	1764	100.0	0	0.0	0	0.0
182	TALLYMEN	2	1695	90.0	1689	10.0	0	0.0
179	BANDER OPERATOR	2	1000	100.0	0	0.0	0	0.0
176	DRY CHAIN PULLER	12	1742	90.0	1740	10.0	0	0.0
176	DRY CHAIN PULLER	1	1694	70.0	1689	30.0	0	0.0
173	GRADER/PLANER MILL	6	1716	90.0	1715	10.0	0	0.0
173	GRADER/PLANER MILL	1	1716	50.0	1000	50.0	0	0.0
173	GRADER/PLANER MILL	1	1694	50.0	1689	50.0	0	0.0
168	PLANER SET-UP MAN	6	1702	50.0	1711	50.0	0	0.0
167	PLANER OPERATOR	6	1711	90.0	1710	10.0	0	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                                  DBN JOB NO.   9635

                         INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242                        PLANT NO:  8                        DATE: 1980

 JOB     JOB DESCRIPTION              NO OF      TIME SPENT USING EQUIPMENT CODE
CODE                                  PERS.   CODE   TIME   CODE   TIME   CODE   TIME

 160     KILN OPERATOR                    2   1687   30.0   1000   70.0      0    0.0

 155     STICKERMAN-GREEN                 1   1691   90.0   1689   10.0      0    0.0

 154     STACKER-GREEN                    7   1690   90.0   1689   10.0      0    0.0

 154     STACKER-GREEN                    1   1694   90.0   1000   10.0      0    0.0

 148     TRIMMER OPERATOR                 6   1670   90.0   1669   10.0      0    0.0

 145     GREEN CHAIN OPERATOR             1   1694   30.0   1689   70.0      0    0.0

 143     UNSCRAMBLE OPERATOR              1   1694   40.0   1689   60.0      0    0.0

 104     PLANER SUPERVISOR                3   1000   15.0   1700   25.0   1760   [illegible]
                                              1685   20.0   1689   20.0      0    0.0
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ENVIRONMENTAL PROTECTION AGENCY

B&M JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26200	CLEAN-UP MAN/DOWN TM	2	1000	8.0	0.0
26100	CLEAN-UP MAN/REGULAR	2	1000	0.8	0.0
			1700	2.4	0.0
			1760	1.6	0.0
			1665	1.6	0.0
			1689	1.6	0.0
22300	MECHANICS	2	1000	8.0	0.0
21900	MACHINISTS	1	1000	8.0	0.0
21300	MILLWRIGHT/PLANER	1	1700	0.8	0.0
			1000	6.0	0.0
			1760	0.8	0.0
			1665	0.4	0.0
20200	FORKLIFT OPERATOR	7	1802	4.8	0.0
			1000	3.2	0.0
20100	LUMBER CARRIER OPER	1	1810	4.8	0.0
			1000	3.2	0.0
19100	SPECIALTY RESAW OFFB	2	1766	8.0	0.0
19000	SPECIALTY RESAW OPER	1	1764	8.0	0.0
18200	TALLYMEN	2	1695	7.2	0.0
			1689	0.8	0.0
17900	BANDER OPERATOR	2	1000	8.0	0.0
17601	DRY CHAIN PULLER	1	1694	5.6	0.0
			1689	2.4	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
17600	DRY CHAIN PULLER	12	1742	7.2	0.0
			1740	0.8	0.0
17302	GRADER/PLANER MILL	1	1694	4.0	0.0
			1689	4.0	0.0
17301	GRADER/PLANER MILL	1	1716	4.0	0.0
			1000	4.0	0.0
17300	GRADER/PLANER MILL	6	1716	7.2	0.0
			1715	0.8	0.0
16800	PLANER SET-UP MAN	6	1702	4.0	0.0
			1711	4.0	0.
16700	PLANER OPERATOR	6	1711	7.2	0.0
			1710	0.8	0.0
16000	KILN OPERATOR	2	1687	2.4	0.0
			1000	5.6	0.0
15500	STICKERMAN-GREEN	1	1691	7.2	0.0
			1689	0.8	0.0
15401	STACKER-GREEN	1	1694	7.2	0.0
			1000	0.8	0.0
15400	STACKER-GREEN	7	1690	7.2	0.0
			1689	0.8	0.0
14800	TRIMMER OPERATOR	6	1670	7.2	0.0
			1669	0.8	0.0
14500	GREEN CHAIN OPERATOR	1	1694	2.4	0.0
			1689	5.6	0.0

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 8 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
14300	UNSCRAMBLE OPERATOR	1	1694	3.2	0.0
			1689	4.8	0.0
10400	PLANER SUPERVISOR	3	1000	1.2	0.0
			1700	2.0	0.0
			1760	1.6	0.0
			1665	1.6	0.0
			1689	1.6	0.0

PLANT NO. 9

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT EQUIPMENT DATA

SIC CODE: 242 PLANT NO: 9 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1883	BACK/MECHANIC SHP	67.5
1802	FORKLIFT	66.6
1782	CHIPPER/ENCL	108.0
1782	CHIPPER/ENCL	106.0
1781	CHIPPER/ENCL	100.0
1781	CHIPPER/ENCL	96.0
1776	CONVEYOR	90.0
1696	KILN CHAIN CONVYR	64.0
1695	KILN CHAIN CONVYR	75.0
1693	KILN CHAIN CONVYR	78.0
1693	KILN CHAIN CONVYR	76.0
1691	KILN CHAIN CONVYR	92.0
1691	KILN CHAIN CONVYR	80.0
1690	KILN CHAIN CONVYR	94.0
1690	KILN CHAIN CONVYR	58.0
1689	BACK/KILN CHAIN	63.7
1687	KILN	90.0
1687	KILN	74.0
1682	GREEN CHAIN CONVY	88.0
1682	GREEN CHAIN CONVY	92.0
1680	BACK/GREEN CHAIN	63.1
1670	TRIMMER	80.0
1669	TRIMMER	77.0
1649	RESAW-LARGE	95.0
1648	RESAW-LARGE	90.0
1647	RESAW-LARGE	93.0
1646	RESAW-LARGE	68.5
1636	EDGER	82.0
1635	EDGER	78.0
1623	HEADRIG	53.0
1622	HEADRIG	78.0
1617	CUT-OFF SAW	70.0
1616	CUT-OFF SAW	65.0
1600	DEBARKER	79.0

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ENVIRONMENTAL PROTECTION AGENCY                                 BBN JOB NO.   963

                              INPUT BACKGROUND DATA

SIC CODE:  242                      PLANT NO:  9                      DATE: 1980

BACK. GENERAL NAME                  LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                                DBA   CODE CONTR.  CODE CONTR.  CODE CONTR.

1861  BACK/FILEROOM                 76.0  1623  0.60   1600  0.40      0  0.0
1873  BACK/MACHINE SHOP             72.0  1776  0.50   1638  0.30   1623  0.20
1871  BACK/BASEMENT                 94.0  1623  0.50   1638  0.40   1776  0.10
1871  BACK/BASEMENT                 90.0  1776  0.80   1670  0.20      0  0.0
1799  BACK/OFFICE/SAWML             63.0  1638  0.50   1623  0.40   1776  0.10
1665  BACK/TRIMMER                  92.0  1647  0.90   1776  0.10      0  0.0
1645  BACK/RESAW                    94.0  1647  0.70   1776  0.30      0  0.0
1630  BACK/EDGER                    90.0  1638  0.80   1670  0.20      0  0.0
1630  BACK/EDGER                    96.0  1638  0.70   1623  0.30      0  0.0
1621  BACK/HEADRIG                  95.0  1623  0.70   1638  0.30      0  0.0
1601  BACK/DEBARKER                 87.0  1600  0.60   1623  0.40      0  0.0
1601  BACK/DEBARKER                 93.0  1600  1.00      0  0.0       0  0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1782	CHIPPER/ENCL	2	107.0	1.41
1781	CHIPPER/ENCL	2	98.0	2.83
1621	BACK/HEADRIG	1	95.0	0.0
1649	RESAW-LARGE	1	95.0	0.0
1645	BACK/RESAW	1	94.0	0.0
1630	BACK/EDGER	2	93.0	4.24
1647	RESAW-LARGE	1	93.0	0.0
1665	BACK/TRIMMER	1	92.0	0.0
1871	BACK/BASEMENT	2	92.0	2.83
1690	KILN CHAIN CONVYR	2	91.0	4.24
1601	BACK/DEBARKER	2	90.0	4.24
1648	RESAW-LARGE	1	90.0	0.0
1682	GREEN CHAIN CONVY	2	90.0	2.83
1691	KILN CHAIN CONVYR	2	89.0	4.24
1646	RESAW-LARGE	1	88.5	0.0
1802	FORKLIFT	1	86.5	0.0
1696	KILN CHAIN CONVYR	1	84.0	0.0
1689	BACK/KILN CHAIN	1	83.7	0.0
1680	BACK/GREEN CHAIN	1	83.1	0.0
1623	HEADRIG	1	83.0	0.0
1799	BACK/OFFICE/SAWML	1	83.0	0.0
1636	EDGER	1	82.0	0.0
1687	KILN	2	82.0	11.31
1670	TRIMMER	1	80.0	0.0
1622	HEADRIG	1	78.0	0.0
1635	EDGER	1	78.0	0.0
1669	TRIMMER	1	77.0	0.0
1693	KILN CHAIN CONVYR	2	77.0	1.41
1881	BACK/FILEROOM	1	76.0	0.0
1695	KILN CHAIN CONVYR	1	75.0	0.0
1873	BACK/MACHINE SHOP	1	72.0	0.0
1617	CUT-OFF SAW	1	70.0	0.0
1883	BACK/MECHANIC SHP	1	67.5	0.0
1638	BACK. ONLY CONTR.	0	66.6	0.0
1616	CUT-OFF SAW	1	65.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1779	CHIPPER	4	102.5	2.24
1644	RESAW/LARGE	4	91.6	0.0
1776	CONVEYOR/GEN	1	90.0	0.0
1679	GREEN CHAIN	3	87.7	2.83
1800	FORKLIFT	1	86.6	0.0
1688	KILN CHAIN	9	84.1	3.56
1685	KILN	2	82.0	11.31
1620	HEADRIG	2	80.5	0.0
1629	EDGER	2	80.0	0.0
1600	DEBARKER	1	79.0	0.0
1664	TRIMMER	2	78.5	0.0
1882	MECHANIC SHOP/GARAGE	1	67.5	0.0
1610	CUT-OFF	2	67.5	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 242

PLANT NO: 9

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	TIME	CODE	TIME	CODE	TIME
145	GREEN CHAIN OPERATOR	2	1682	50.0	1680	50.0	0	0.0
140	RESAW OPERATOR	2	1647	75.0	1646	25.0	0	0.0
137	CHIPPER OPERATOR	2	1762	10.0	1621	5.0	1630	40.0
			1665	40.0	1776	5.0	0	0.0
134	EDGER OPERATOR	2	1636	75.0	1635	25.0	0	0.0
123	SAWYER	2	1623	75.0	1622	25.0	0	0.0
117	DECK SCALER	2	1601	100.0	0	0.0	0	0.0
114	DEBARKER OPERATOR	2	1660	50.0	1600	50.0	0	0.0
101	SAWMILL SUPERVISOR	2	1799	50.0	1621	10.0	1630	20.0
			1665	10.0	1645	10.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26200	CLEAN-UP MAN/DOWN TM	1	1871	2.0	0.0
			1776	1.6	0.0
			1665	1.2	0.0
			1000	3.2	0.0
26100	CLEAN-UP MAN/REGULAR	1	1776	1.2	0.0
			1000	1.2	0.0
			1601	4.0	0.0
			1871	1.6	0.0
24500	OILER	2	1000	2.0	0.0
			1871	4.0	0.0
			1621	0.8	0.0
			1630	0.8	0.0
			1665	0.4	0.0
24400	FILERS	2	1881	4.0	0.0
			1630	0.8	0.0
			1665	0.8	0.0
			1645	0.8	0.0
			1621	1.6	0.0
23300	CARPENTERS	2	1621	1.6	0.0
			1630	1.6	0.0
			1665	1.6	0.0
			1645	1.6	0.0
			1871	1.6	0.0
22300	MECHANICS	7	1883	8.0	0.0
21900	MACHINISTS	1	1873	8.0	0.0
21200	MILLWRIGHT/SAWMILL	8	1000	0.8	0.0
			1873	0.8	0.0
			1621	2.4	0.0
			1630	2.4	0.0
			1645	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
20200	FORKLIFT OPERATOR	4	1802	4.8	0.0
			1000	3.2	0.0
18200	TALLYMEN	1	1695	8.0	0.0
17600	DRY CHAIN PULLER	4	1693	8.0	0.0
17300	GRADER/PLANER MILL	1	1696	8.0	0.0
16000	KILN OPERATOR	2	1687	2.8	0.0
			1000	5.2	0.0
15500	STICKERMAN-GREEN	2	1691	4.0	0.0
			1689	4.0	0.0
15400	STACKER-GREEN	2	1690	4.0	0.0
			1689	4.0	0.0
14800	TRIMMER OPERATOR	2	1670	4.0	0.0
			1669	4.0	0.0
14500	GREEN CHAIN OPERATOR	2	1682	4.0	0.0
			1680	4.0	0.0
14000	RESAW OPERATOR	2	1647	6.0	0.0
			1646	2.0	0.0
13700	CHIPPER OPERATOR	2	1782	0.8	0.0
			1621	0.4	0.0
			1630	3.2	0.0
			1665	3.2	0.0
			1776	0.4	0.0
13400	EDGER OPERATOR	2	1636	6.0	0.0
			1635	2.0	0.0

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
12300	SAWYER	2	1623	6.0	0.0
			1622	2.0	0.0
11700	DECK SCALER	2	1601	8.0	0.0
11400	DEBARKER OPERATOR	2	1600	4.0	0.0
			1000	4.0	0.0
10100	SAWMILL SUPERVISOR	2	1799	4.0	0.0
			1621	0.8	0.0
			1630	1.6	0.0
			1665	0.8	0.0
			1645	0.8	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242

PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1702	PLANER	12	112.8	3.95
1735	MOULDER	2	103.5	2.12
1782	CHIPPER/ENCL	3	103.3	6.43
1764	CHIPPER	16	103.1	3.68
1763	RESAW-SPECIALTY	2	100.0	0.0
1613	CUT-OFF SAW	3	99.3	2.52
1781	CHIPPER/ENCL	2	98.0	2.83
1790	HOG	2	98.0	5.66
1627	HEADRIG	3	97.7	6.66
1626	HEADRIG	3	97.3	2.08
1824	QUADSAW	1	97.0	0.0
1764	RESAW-SPECIALTY	4	96.5	6.61
1780	BACK/CHIPPER	4	96.3	4.79
1645	BACK/RESAW	5	95.8	1.10
1636	EDGER	4	95.5	9.04
1683	GREEN CHAIN CONVY	4	95.3	2.06
1619	CUT-OFF SAW	1	95.0	0.0
1649	RESAW-LARGE	1	95.0	0.0
1674	TRIMMER	1	95.0	0.0
1734	MOULDER	1	95.0	0.0
1788	HOG/ENCL	2	95.0	1.41
1823	QUADSAW	1	95.0	0.0
1829	BACK/GANG SAW	2	95.0	5.66
1768	RESAW-SPECIALTY	3	94.7	3.21
1789	HOG	3	94.7	6.43
1767	RESAW-SPECIALTY	2	94.5	0.71
1711	PLANER/ENCL	15	94.2	3.67
1618	CUT-OFF SAW	1	94.0	0.0
1620	BACK/QUAD SAW	1	94.0	0.0
1851	RIPSAW-SPECIALTY	1	94.0	0.0
1630	BACK/EDGER	9	93.6	2.60
1621	BACK/HEADRIG	8	93.5	3.76
1647	RESAW-LARGE	4	93.0	2.16
1715	PLANER/ENCL	1	93.0	0.0
1716	PLANER/ENCL	14	92.8	2.61
1700	BACK/PLANER	9	92.6	2.01
1639	EDGER	2	92.5	0.71
1672	TRIMMER	8	92.0	3.46
1725	BACK/MOULDER	1	92.0	0.0
1853	RIPSAW-SPECIALTY	1	92.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                    OBN JOB NO.   96

                      INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  242                    PLANT NO:  9                      DATE: 196

 JOB    JOB DESCRIPTION           NO OF    TIME SPENT USING EQUIPMENT CODE
CODE                              PERS.  CODE   TIME   CODE   TIME   CODE   TIM

 262    CLEAN-UP MAN/DOWN TM          1  1671   25.0   1776   20.0   1665   15.0
                                         1000   40.0      0    0.0      0    0.0

 261    CLEAN-UP MAN/REGULAR          1  1776   15.0   1000   15.0   1601   50.0
                                         1671   20.0      0    0.0      0    0.0

 245    OILER                         2  1000   25.0   1871   50.0   1621   10.0
                                         1630   10.0   1665    5.0      0    0.0

 244    FILERS                        2  1681   50.0   1630   10.0   1665   10.0
                                         1645   10.0   1621   20.0      0    0.0

 233    CARPENTERS                    2  1621   20.0   1630   20.0   1665   [illegible]
                                         1645   20.0   1871   20.0      0    0.0

 223    MECHANICS                     7  1683  100.0      0    0.0      0    0.0

 219    MACHINISTS                    1  1673  100.0      0    0.0      0    0.0

 212    MILLWRIGHT/SAWMILL            8  1000   10.0   1673   10.0   1621   30.0
                                         1630   30.0   1645   20.0      0    0.0

 202    FORKLIFT OPERATOR             4  1602   60.0   1000   40.0      0    0.0

 182    TALLYMEN                      1  1695  100.0      0    0.0      0    0.0

 176    DRY CHAIN PULLER              4  1693  100.0      0    0.0      0    0.0

 173    GRADER/PLANER MILL            1  1696  100.0      0    0.0      0    0.0

 160    KILN OPERATOR                 2  1667   35.0   1000   65.0      0    0.0

 155    STICKERMAN-GREEN              2  1691   50.0   1689   50.0      0    0.0

 154    STACKER-GREEN                 2  1690   50.0   1669   50.0      0    0.0

 148    TRIMMER OPERATOR              2  1670   50.0   1669   50.0      0    0.0
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ENVIRONMENTAL PROTECTION AGENCY                                    BDN JOB NO.   9635

                BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE =  242                                                  NO DATES SPECIFIED
PLANT NOS. =    9,  8,  7,  6,  5,  4,  3,  2,  1,

EQUIP.         GENERIC NAME                NO. OF          MEAN            STD.
 CODE                                      SAMPLES        LEQ(DBA)         DEV.

 1710       PLANER/ENCL                       4             91.3            5.12
 1671       TRIMMER                           1             91.0            0.0
 1760       BACK/SPEC RESAW                   3             91.0            1.00
 1787       HOG/ENCL                          1             91.0            0.0
 1815       TRANSFER CARRIER                  2             91.0           15.56
 1665       BACK/TRIMMER                     13             90.6            4.25
 1646       RESAW-LARGE                       1             90.0            0.0
 1766       RESAW-SPEC/ENCL                   2             90.0            1.41
 1783       CHIPPER                           9             90.0            2.96
 1822       QUADSAW                           1             90.0            0.0
 1871       BACK/BASEMENT                    11             89.1            4.46
 1635       EDGER                             4             88.5            7.19
 1646       RESAW-LARGE                       4             88.5            3.87
 1692       KILN CHAIN CONVYR                 7             88.4            3.64
 1696       KILN CHAIN CONVYR                 3             88.0            6.05
 1762       RESAW-SPEC/ENCL                   2             88.0            2.83
 1670       TRIMMER                          11             87.7            8.20
 1601       BACK/DEBARKER                     4             87.5            5.00
 1794       POWERHOUSE                        2             87.5            4.95
 1742       DRY CHAIN CONVEYR                10             86.9            2.13
 1802       FORKLIFT                          9             86.8            3.04
 1682       GREEN CHAIN CONVY                15             86.5            4.50
 1690       KILN CHAIN CONVYR                17             86.4            6.31
 1796       POWERHOUSE                        3             86.3            4.04
 1669       TRIMMER                          12             86.3            8.64
 1695       KILN CHAIN CONVYR                 5             86.2            6.83
 1638       EDGER                             8             85.9            8.24
 1694       KILN CHAIN CONVYR                 9             85.4            2.88
 1691       KILN CHAIN CONVYR                14             85.4            6.39
 1741       DRY CHAIN CONVEYR                10             85.2            3.05
 1612       CUT-OFF SAW                       2             85.0            2.83
 1793       BACK/POWERHOUSE                   3             84.7            3.06
 1727       MOULDER/ENCL                      2             84.5            4.95
 1814       BACK/TRANSFER RM                  1             84.0            0.0
 1849       BACK/SPEC RIPSAW                  1             84.0            0.0
 1850       RIPSAW-SPECIALTY                  1             84.0            0.0
 1686       BACK/KILN&CNTL RM                 6             83.7            6.26
 1689       BACK/KILN CHAIN                   6             83.7            5.09
 1637       EDGER                             8             83.6            9.56
 1687       KILN                              7             83.5            6.02
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 242 NO DATES SPECIFIE

PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1752	STACK BANDER	3	83.5	1.53
1623	HEADRIG	9	83.2	4.56
1680	BACK/GREEN CHAIN	7	83.1	6.47
1799	BACK/OFFICE/SAWML	1	83.0	0.0
1693	KILN CHAIN CONVYR	13	82.9	6.10
1740	BACK/DRY CHAIN	6	82.8	2.71
1852	RIPSAW-SPECIALTY	1	82.0	0.0
1731	MOULDER/ENCL	3	81.3	6.00
1881	BACK/FILEROOM	12	81.2	4.05
1622	HEADRIG	4	79.1	4.76
1513	WHEEL GRINDER	1	79.0	0.0
1751	STACK BANDER	3	79.0	3.61
1603	DEBARKER	7	78.3	6.75
1831	GANG SAW	2	78.0	1.[illegible]
1616	CUT-OFF SAW	5	77.8	12.33
1726	MOULDER/ENCL	2	76.5	2.12
1713	BACK. ONLY CONTR.	6	76.0	2.01
1681	GREEN CHAIN CONVY	1	76.0	0.0
1816	TRANSFER CARRIER	1	76.0	0.0
1617	CUT-OFF SAW	4	75.8	6.13
1830	GANG SAW	2	75.5	2.12
1602	DEBARKER	7	75.4	6.03
1877	BACK/ELECT SHOP	1	75.0	0.0
1879	BACK/PIPE SHOP	2	75.0	14.14
1654	RESAW-LARGE	1	74.0	0.0
1655	RESAW-LARGE	1	74.0	0.0
1658	RESAW-LARGE	1	74.0	0.0
1659	RESAW-LARGE	1	74.0	0.0
1607	DEBARKER	1	72.0	0.0
1873	BACK/MACHINE SHOP	7	71.9	6.84
1883	BACK/MECHANIC SHP	2	67.5	3.54
1606	DEBARKER	1	65.0	0.0
1869	BACK/STORAGE	1	65.0	0.0
1875	BACK/CARPNTR SHOP	1	65.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

            EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE =  242                                          NO DATES SPECIFIED
PLANT NOS. =   9,  8,  7,  6,  5,  4,  3,  2,  1,

EQUIP.        GENERIC NAME               NO. OF        MEAN         STD.
 CODE                                    SAMPLES     LEQ(DBA)       DEV.

 1779        CHIPPER                        30          96.9         3.61
 1699        PLANER                         40          96.3         3.62
 1785        HOG                             8          95.1         5.40
 1759        RESAW/SPECIALTY                15          94.3         4.24
 1819        QUADSAW                         3          94.0         0.0
 1803        LOG CARRIER                     1          90.0         0.0
 1664        TRIMMER                        33          88.5         7.60
 1848        RIP SAW/SPECIALTY               4          88.0         0.0
 1776        CONVEYOR/GEN                    5          87.8         3.11
 1679        GREEN CHAIN                    20          87.7         4.18
 1629        EDGER                          26          87.6         6.49
 1724        MOULDER                        10          86.8         4.94
 1792        POWERHOUSE                      5          86.8         4.37
 1800        FORKLIFT                        9          86.6         3.64
 1644        RESAW/LARGE                    14          86.2         3.14
 1739        DRY CHAIN                      20          86.0         3.11
 1813        TRANSFER CARRIER                3          86.0        15.56
 1688        KILN CHAIN                     68          85.7         5.76
 1810        LUMBER CARRIER                  8          85.4         2.45
 1620        HEADRIG                        24          85.2         4.75
 1610        CUT-OFF                        16          84.3         8.90
 1685        KILN                            7          83.5         6.02
 1749        STACK BANDER                    6          81.2         2.77
 1823        GANG SAW                        4          76.8         1.50
 1600        DEBARKER                       17          76.0         6.79
 1747        RAIL CAR LOAD                   3          72.7         6.66
 1798        SAWMILL OFFICE                  1          70.0         0.0
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ENVIRONMENTAL PROTECTION AGENCY B&N JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26603	HELPER	1	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
26602	HELPER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1871	1.6	0.0
26601	HELPER	1	1000	8.0	[illegible]
26600	HELPER	6	1802	4.0	0.0
			1000	4.0	0.0
26504	LABORER	1	1000	4.0	0.0
			1630	0.8	0.0
			1740	0.8	0.0
			1820	1.2	0.0
			1700	1.2	0.0
26503	LABORER	1	1000	3.2	0.0
			1680	1.2	0.0
			1700	2.4	0.0
			1740	1.2	0.0
26502	LABORER	1	1000	1.6	0.0
			1740	6.4	0.0
26501	LABORER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1871	1.6	0.0

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26500	LABORER	2	1000	8.0	0.0
26202	CLEAN-UP MAN/DOWN TM	3	1776	8.0	0.0
26201	CLEAN-UP MAN/DOWN TM	4	1000	8.0	0.0
26200	CLEAN-UP MAN/DOWN TM	1	1871	2.0	0.0
			1776	1.6	0.0
			1665	1.2	0.0
			1000	3.2	0.0
26106	CLEAN-UP MAN/REGULAR	2	1784	1.6	0.0
			1783	1.6	0.0
			1776	4.8	0.0
26105	CLEAN-UP MAN/REGULAR	1	1700	8.0	0.0
26104	CLEAN-UP MAN/REGULAR	1	1000	3.2	0.0
			1871	3.6	0.0
			1621	0.4	0.0
			1630	0.4	0.0
			1645	0.4	0.0
26103	CLEAN-UP MAN/REGULAR	2	1000	4.0	0.0
			1871	1.6	0.0
			1621	1.2	0.0
			1630	1.2	0.0
26102	CLEAN-UP MAN/REGULAR	1	1000	4.0	0.0
			1700	1.6	0.0
			1680	0.8	0.0
			1740	0.8	0.0
			1689	0.8	0.0
26101	CLEAN-UP MAN/REGULAR	2	1000	0.8	0.0
			1700	2.4	0.0
			1760	1.6	0.0
			1665	1.6	0.0
			1689	1.6	0.0

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26100	CLEAN-UP MAN/REGULAR	1	1776	1.2	0.0
			1000	1.2	0.0
			1601	4.0	0.0
			1871	1.6	0.0
24802	POWERHOUSE OPERATOR	12	1794	4.0	0.0
			1796	4.0	0.0
24801	POWERHOUSE OPERATOR	3	1793	8.0	0.0
24800	POWERHOUSE OPERATOR	3	1686	0.4	0.0
			1793	7.6	0.0
24502	OILER	2	1601	1.6	0.0
			1820	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0.0
			1630	1.6	0.0
24501	OILER	2	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
24500	OILER	2	1000	2.0	0.0
			1871	4.0	0.0
			1621	0.8	0.0
			1630	0.8	0.0
			1665	0.4	0.0
24403	FILERS	6	1000	8.0	0.0
24402	FILERS	5	1000	0.4	0.0
			1881	7.6	0.0

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242   NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
24401	FILERS	14	1881	8.0	0.0
24400	FILERS	2	1881	4.0	0.0
			1630	0.8	0.0
			1665	0.8	0.0
			1645	0.8	0.0
			1621	1.6	0.0
23801	PIPE-FITTERS	2	1000	4.0	0.0
			1776	1.2	0.0
			1621	1.2	0.0
			1630	0.8	0.0
			1700	0.8	0.0
23800	PIPE-FITTERS	1	1879	1.2	0.0
			1000	0.4	0.0
			1820	2.4	0.0
			1740	2.4	0.0
			1793	1.6	0.0
23303	CARPENTERS	4	1000	4.0	0.0
			1776	1.2	0.0
			1621	1.2	0.0
			1630	0.8	0.0
			1700	0.8	0.0
23302	CARPENTERS	1	1820	1.6	0.0
			1645	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0
23301	CARPENTERS	1	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY　　　　BBN JOB NO.　9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242　　　　NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
23300	CARPENTERS	2	1621	1.6	0.0
			1630	1.6	0.0
			1665	1.6	0.0
			1645	1.6	0.0
			1871	1.6	0.0
22804	ELECTRICIANS	5	1877	2.0	0.0
			1776	4.0	0.0
			1621	0.8	0.0
			1630	0.4	0.0
			1700	0.8	0.0
22803	ELECTRICIANS	3	1820	1.6	[illegible]
			1645	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0
22802	ELECTRICIANS	1	1000	4.0	0.0
			1630	2.4	0.0
			1645	0.8	0.0
			1621	0.8	0.0
22801	ELECTRICIANS	2	1000	1.6	0.0
			1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1630	1.6	0.0
22800	ELECTRICIANS	30	1000	4.0	0.0
			1621	1.6	0.0
			1700	1.6	0.0
			1665	0.8	0.0
22301	MECHANICS	15	1000	8.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
22300	MECHANICS	8	1883	8.0	0.0
21903	MACHINISTS	5	1873	1.6	0.0
			1820	1.6	0.0
			1630	1.6	0.0
			1700	1.6	0.0
			1740	1.6	0.0
21902	MACHINISTS	8	1873	3.2	0.0
			1000	4.8	0.0
21901	MACHINISTS	4	1000	8.0	0.0
21900	MACHINISTS	2	1873	8.0	0.0
21700	WELDER	1	1000	8.0	0.0
21600	SHOPMAN/GENERAL	1	1000	4.8	0.0
			1621	0.8	0.0
			1680	0.8	0.0
			1630	0.8	0.0
			1665	0.8	0.0
21302	MILLWRIGHT/PLANER	3	1000	4.0	0.0
			1702	0.8	0.0
			1621	0.8	0.0
			1740	2.4	0.0
21301	MILLWRIGHT/PLANER	3	1680	2.0	0.0
			1700	4.0	0.0
			1740	2.0	0.0
21300	MILLWRIGHT/PLANER	1	1700	0.8	0.0
			1000	6.0	0.0
			1760	0.8	0.0
			1665	0.4	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,
NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
21202	MILLWRIGHT/SAWMILL	3	1871	1.6	0.0
			1621	1.6	0.0
			1630	1.6	0.0
			1645	1.6	0.0
			1680	1.6	0.0
21201	MILLWRIGHT/SAWMILL	4	1647	0.2	0.0
			1881	2.2	0.0
			1630	2.0	0.0
			1665	2.0	0.0
			1680	1.6	0.0
21200	MILLWRIGHT/SAWMILL	8	1000	0.8	0
			1873	0.8	0.0
			1621	2.4	0.0
			1630	2.4	0.0
			1645	1.6	0.0
21104	MILLWRIGHT/GENERAL	4	1621	6.8	0.0
			1000	1.2	0.0
21103	MILLWRIGHT/GENERAL	5	1601	1.6	0.0
			1820	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0.0
			1630	1.6	0.0
21102	MILLWRIGHT/GENERAL	2	1881	4.0	0.0
			1630	2.4	0.0
			1645	0.8	0.0
			1621	0.8	0.0
21101	MILLWRIGHT/GENERAL	4	1829	1.6	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1700	1.6	0.0
			1630	1.6	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  242                                               NO DATES SPECIFIED
PLANT NOS. =    9,  8,  7,  6,  5,  4,  3,  2,  1,

 JOB          JOB DESCRIPTION          NO. OF    EQUIP.     NOR. MEAN     NOR. STD.
CODE                                   PERS.      CODE      TIME-8HRS     DEVIATION

21100    MILLWRIGHT/GENERAL              40       1000         4.0           0.0
                                                  1621         1.6           0.0
                                                  1700         1.6           0.0
                                                  1665         0.8           0.0

20701    RAILCAR LOADER                  11       1747         8.0           0.0

20700    RAILCAR LOADER                   2       1000         8.0           0.0

20204    FORKLIFT OPERATOR                5       1752         1.6           0.0
                                                  1802         6.4           0.0

20203    FORKLIFT OPERATOR               19       1800         8.0           0.0

20202    FORKLIFT OPERATOR                3       1800         4.0           0.0
                                                  1682         3.2           0.0
                                                  1680         0.8           0.0

20201    FORKLIFT OPERATOR                7       1802         8.0           0.0

20200    FORKLIFT OPERATOR               23       1802         5.0           0.69
                                                  1000         3.0           0.69

20101    LUMBER CARRIER OPER             11       1810         8.0           0.0

20100    LUMBER CARRIER OPER              9       1810         5.2           0.94
                                                  1000         2.8           0.94

19700    MOULDER OFFBEARER                3       1731         8.0           0.0

19601    MOULDER FEEDER                   2       1727         6.4           0.0
                                                  1726         1.6           0.0

19600    MOULDER FEEDER                   1       1727         6.4           0.0
                                                  1734         1.6           0.0
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PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1, NO DATES SPECIFIE

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. ST DEVIATI
19102	SPECIALTY RESAW OFFB	2	1766	8.0	0.0
19101	SPECIALTY RESAW OFFB	1	1764	4.0	0.0
			1700	2.8	0.0
			1740	1.2	0.0
19100	SPECIALTY RESAW OFFB	2	1768	8.0	0.0
19002	SPECIALTY RESAW OPER	2	1762	8.0	0.0
19001	SPECIALTY RESAW OPER	1	1764	4.0	0.0
			1700	2.8	0.0
			1740	1.2	0.0
19000	SPECIALTY RESAW OPER	1	1764	8.0	0.0
18600	RIPSAW OFFBEARER	1	1853	8.0	0.0
18500	RIPSAW OPERATOR	1	1851	8.0	0.0
18204	TALLYMEN	1	1695	6.4	0.0
			1665	1.6	0.0
18203	TALLYMEN	6	1000	8.0	0.0
18202	TALLYMEN	4	1689	8.0	0.0
18201	TALLYMEN	2	1695	7.2	0.0
			1689	0.8	0.0
18200	TALLYMEN	3	1695	8.0	0.0
18100	CHECKERS	6	1740	8.0	0.0
17903	BANDER OPERATOR	3	1751	4.0	0.0
			1752	4.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
17902	BANDER OPERATOR	2	1752	8.0	0.0
17901	BANDER OPERATOR	2	1752	3.2	0.0
			1700	1.6	0.0
			1689	1.6	0.0
			1665	1.6	0.0
17900	BANDER OPERATOR	2	1000	8.0	0.0
17606	DRY CHAIN PULLER	20	1741	8.0	0.0
17605	DRY CHAIN PULLER	26	1741	7.0	0.0
			1694	1.0	0.0
17604	DRY CHAIN PULLER	4	1742	6.4	0.0
			1665	1.6	0.0
17603	DRY CHAIN PULLER	10	1742	8.0	0.0
17602	DRY CHAIN PULLER	1	1694	5.6	0.0
			1689	2.4	0.0
17601	DRY CHAIN PULLER	12	1742	7.2	0.0
			1740	0.8	0.0
17600	DRY CHAIN PULLER	18	1693	8.0	0.0
17306	GRADER/PLANER MILL	16	1716	5.6	0.0
			1700	2.4	0.0
17305	GRADER/PLANER MILL	20	1716	8.0	0.0
17304	GRADER/PLANER MILL	9	1689	8.0	0.0
17303	GRADER/PLANER MILL	1	1694	4.0	0.0
			1689	4.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 96

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFI
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. S DEVIAT
17302	GRADER/PLANER MILL	1	1716	4.0	0.0
			1000	4.0	0.0
17301	GRADER/PLANER MILL	6	1716	7.2	0.0
			1715	0.8	0.0
17300	GRADER/PLANER MILL	1	1696	8.0	0.0
16804	PLANER SET-UP MAN	2	1702	1.0	0.0
			1711	3.5	0.0
			1716	3.5	0.0
16803	PLANER SET-UP MAN	1	1702	1.6	0.0
			1700	4.4	0.0
			1881	2.0	0.0
16802	PLANER SET-UP MAN	2	1881	6.8	0.0
			1000	0.8	0.0
			1702	0.4	0.0
16801	PLANER SET-UP MAN	2	1711	3.6	0.0
			1702	0.4	0.0
			1881	4.0	0.0
16800	PLANER SET-UP MAN	6	1702	4.0	0.0
			1711	4.0	0.0
16703	PLANER OPERATOR	8	1711	5.6	0.0
			1700	2.4	0.0
16702	PLANER OPERATOR	7	1711	7.6	0.34
			1702	0.4	0.34
16701	PLANER OPERATOR	4	1711	7.2	0.0
			1710	0.4	0.0
			1000	0.4	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                                    BBN JOB NO.   9635

                         PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  242                                                NO DATES SPECIFIED
PLANT NOS. =    9,   8,   7,   6,   5,   4,   3,   2,   1,

 JOB        JOB DESCRIPTION           NO. OF    EQUIP.     NOR. MEAN     NOR. STD.
CODE                                  PERS.      CODE      TIME-8HRS     DEVIATION

16700    PLANER OPERATOR                  9       1711         7.3           0.20
                                                  1710         0.7           0.20

16301    GRADER/SORTING CHAIN             1       1682         6.4           0.0
                                                  1689         1.6           0.0

16300    GRADER/SORTING CHAIN             2       1692         8.0           0.0

16201    UNSTACKER PULLER                 3       1692         3.2           0.0
                                                  1740         4.8           0.0

16200    UNSTACKER PULLER                 8       1693         8.0           0.0

16102    UNSTACKER-DRY                    2       1692         6.8           0.0
                                                  1700         1.2           0.0

16101    UNSTACKER-DRY                    1       1692         3.2           0.0
                                                  1740         4.8           0.0

16100    UNSTACKER-DRY                    4       1692         8.0           0.0

16004    KILN OPERATOR                    3       1000         8.0           0.0

16003    KILN OPERATOR                    1       1686         0.4           0.0
                                                  1814         7.6           0.0

16002    KILN OPERATOR                    1       1686         6.4           0.0
                                                  1000         1.6           0.0

16001    KILN OPERATOR                    2       1802         5.6           0.0
                                                  1000         1.6           0.0
                                                  1686         0.8           0.0

16000    KILN OPERATOR                    4       1687         2.6           0.23
                                                  1000         5.4           0.23
```

ENVIRONMENTAL PROTECTION AGENCY

BSN JOB NO. 963

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIE

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. ST DEVIATI
15901	TRANSFER OPERATOR	2	1814	4.0	0.0
			1815	4.0	0.0
15900	TRANSFER OPERATOR	3	1687	1.6	0.0
			1815	5.6	0.0
			1816	0.8	0.0
15600	UNIPAC OPERATOR	2	1694	8.0	0.0
15503	STICKERMAN-GREEN	2	1691	8.0	0.0
15502	STICKERMAN-GREEN	2	1740	2.8	0.0
			1691	5.2	0.0
15501	STICKERMAN-GREEN	5	1691	6.9	0.44
			1680	1.1	0.44
15500	STICKERMAN-GREEN	8	1691	5.4	1.80
			1689	2.6	1.80
15404	STACKER-GREEN	2	1740	2.8	0.0
			1690	5.2	0.0
15403	STACKER-GREEN	7	1690	8.0	0.0
15402	STACKER-GREEN	5	1690	2.6	3.51
			1680	5.4	1.91
15401	STACKER-GREEN	1	1694	7.2	0.0
			1000	0.8	0.0
15400	STACKER-GREEN	13	1690	6.5	1.15
			1689	1.5	1.15
15103	GREEN CHAIN PULLER	2	1681	8.0	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                         PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  242                                              NO DATES SPECIFIED
PLANT NOS. =    9,  8,  7,  6,  5,  4,  3,  2,  1,

 JOB       JOB DESCRIPTION           NO. OF    EQUIP.    NOR. MEAN    NOR. STD.
CODE                                 PERS.     CODE     TIME-8HRS    DEVIATION

15102    GREEN CHAIN PULLER            12       1683        8.0          0.0

15101    GREEN CHAIN PULLER             9       1682        6.4          0.0
                                                1680        1.6          0.0

15100    GREEN CHAIN PULLER             6       1682        8.0          0.0

14807    TRIMMER OPERATOR               4       1674        4.0          0.0
                                                1670        4.0          0.0

14806    TRIMMER OPERATOR               4       1670        4.0          0.0
                                                1672        4.0          0.0

14805    TRIMMER OPERATOR               2       1670        8.0          0.0

14804    TRIMMER OPERATOR               3       1672        7.2          0.0
                                                1680        0.8          0.0

14803    TRIMMER OPERATOR               3       1670        7.6          0.0
                                                1680        0.4          0.0

14802    TRIMMER OPERATOR               3       1672        6.4          0.0
                                                1665        1.6          0.0

14801    TRIMMER OPERATOR               1       1670        0.8          0.0
                                                1669        0.8          0.0
                                                1630        6.4          0.0

14800    TRIMMER OPERATOR              17       1670        6.8          1.08
                                                1669        1.2          1.08

14503    GREEN CHAIN OPERATOR           6       1682        8.0          0.0

14502    GREEN CHAIN OPERATOR           2       1682        5.6          0.0
                                                1680        2.4          0.0
```

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 963

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIE

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. ST. DEVIATI
14501	GREEN CHAIN OPERATOR	1	1694	2.4	0.0
			1689	5.6	0.0
14500	GREEN CHAIN OPERATOR	2	1682	4.0	0.0
			1680	4.0	0.0
14402	LUMBER DIVERTER	3	1683	7.6	0.0
			1680	0.4	0.0
14401	LUMBER DIVERTER	3	1683	6.4	0.0
			1680	0.4	0.0
			1871	1.2	0.0
14400	LUMBER DIVERTER	1	1630	6.4	0.0
			1621	1.6	0.0
14302	UNSCRAMBLE OPERATOR	2	1672	8.0	0.0
14301	UNSCRAMBLE OPERATOR	2	1682	7.2	0.0
			1680	0.8	0.0
14300	UNSCRAMBLE OPERATOR	1	1694	3.2	0.0
			1689	4.8	0.0
14001	RESAW OPERATOR	2	1654	7.2	0.0
			1655	0.8	0.0
14000	RESAW OPERATOR	10	1647	5.8	0.74
			1646	2.2	0.74
13803	HOG OPERATOR	1	1000	4.0	0.0
			1790	4.0	0.0
13802	HOG OPERATOR	2	1788	4.0	0.0
			1787	4.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIED
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
13801	HOG OPERATOR	2	1871	4.0	0.0
			1790	2.0	0.0
			1784	2.0	0.0
13800	HOG OPERATOR	1	1787	1.2	0.0
			1788	1.2	0.0
			1621	1.6	0.0
			1665	1.6	0.0
			1871	2.4	0.0
13703	CHIPPER OPERATOR	2	1784	4.8	0.0
			1783	0.8	0.0
			1621	2.4	0.0
13702	CHIPPER OPERATOR	2	1639	4.0	0.0
			1784	2.0	0.0
			1783	2.0	0.0
13701	CHIPPER OPERATOR	3	1784	4.5	0.46
			1783	3.5	0.46
13700	CHIPPER OPERATOR	2	1782	0.8	0.0
			1621	0.4	0.0
			1630	3.2	0.0
			1665	3.2	0.0
			1776	0.4	0.0
13401	EDGER OPERATOR	14	1638	6.4	0.85
			1637	1.6	0.85
13400	EDGER OPERATOR	11	1636	5.7	1.37
			1635	2.3	1.37
13300	SLAB BOARD PULLER	2	1639	8.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

B&N JOB NO. 963

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIE

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. ST DEVIATI
13100	GANG SAW OPERATOR	4	1831	7.4	0.23
			1830	0.6	0.23
12800	QUADSAW TAIL SAWYER	2	1824	8.0	0.0
12701	TAIL SAWYER	1	1623	6.8	0.0
			1622	1.2	0.0
12700	TAIL SAWYER	6	1627	6.8	0.62
			1626	1.2	0.62
12301	SAWYER	4	1623	3.6	0.0
			1622	0.4	.0
			1822	4.0	0.0
12300	SAWYER	19	1623	6.3	0.61
			1622	1.7	0.61
12000	CUT-OFF SAW OPERATOR	2	1613	0.8	0.0
			1612	7.2	0.0
11701	DECK SCALER	2	1613	0.4	0.0
			1621	7.6	0.0
11700	DECK SCALER	2	1601	8.0	0.0
11406	DEBARKER OPERATOR	2	1606	3.2	0.0
			1607	4.8	0.0
11405	DEBARKER OPERATOR	2	1603	8.0	0.0
11404	DEBARKER OPERATOR	8	1603	5.4	0.37
			1602	2.2	0.37
			1617	0.4	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                       PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  242
PLANT NOS. =    9,  8,  7,  6,  5,  4,  3,  2,  1,          NO DATES SPECIFIED

 JOB        JOB DESCRIPTION          NO. OF   EQUIP.    NOR. MEAN    NOR. STD.
CODE                                 PERS.     CODE     TIME-8HRS    DEVIATION

11403    DEBARKER OPERATOR              1      1603        6.0          0.0
                                               1619        1.2          0.0
                                               1602        0.4          0.0
                                               1618        0.4          0.0

11402    DEBARKER OPERATOR              2      1000        0.8          0.0
                                               1603        6.0          0.0
                                               1602        0.8          0.0
                                               1617        0.4          0.0

11401    DEBARKER OPERATOR              2      1603        6.4          0.0
                                               1602        1.6          0.0

11400    DEBARKER OPERATOR              2      1600        4.0          0.0
                                               1000        4.0          0.0

11101    LOG CARRIER OPER               1      1808        4.0          0.0
                                               1000        4.0          0.0

11100    LOG CARRIER OPER               1      1000        8.0          0.0

10800    LOG SORTER                     2      1000        8.0          0.0

10700    POND SORTER                    6      1000        8.0          0.0

10402    PLANER SUPERVISOR              4      1000        4.0          0.0
                                               1700        4.0          0.0

10401    PLANER SUPERVISOR              3      1621        1.6          0.0
                                               1630        1.6          0.0
                                               1645        1.6          0.0
                                               1680        1.6          0.0
                                               1665        1.6          0.0

10400    PLANER SUPERVISOR              3      1000        1.2          0.0
                                               1700        2.0          0.0
                                               1760        1.6          0.0
                                               1665        1.6          0.0
                                               1689        1.6          0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 242 NO DATES SPECIFIE
PLANT NOS. = 9, 8, 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. ST DEVIATI
10104	SAWMILL SUPERVISOR	3	1798	4.0	0.0
			1776	1.6	0.0
			1621	1.2	0.0
			1630	1.2	0.0
10103	SAWMILL SUPERVISOR	2	1601	1.6	0.0
			1820	1.6	0.0
			1645	1.6	0.0
			1829	1.6	0.0
			1630	1.6	0.0
10102	SAWMILL SUPERVISOR	3	1621	1.6	0.0
			1630	1.6	0.0
			1645	1.6	0.0
			1660	1.6	0.0
			1665	1.6	0.0
10101	SAWMILL SUPERVISOR	3	1000	0.4	0.0
			1621	2.0	0.0
			1630	2.0	0.0
			1665	2.0	0.0
			1680	1.6	0.0
10100	SAWMILL SUPERVISOR	2	1799	4.0	0.0
			1621	0.8	0.0
			1630	1.6	0.0
			1665	0.8	0.0
			1645	0.8	0.0

APPENDIX D

Foundry Industry Input Data

The tables in this Appendix for the Foundry Industry are similar to those described in Appendix C for the Sawmill Industry. However in this case, seven plants rather than nine are considered.

Plant No. 1

```
ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                  INPUT EQUIPMENT DATA

SIC CODE:  332                PLANT NO:  1                      DATE: 1979

EQUIP.          GENERIC NAME              LEQ
 CODE                                     DBA

 1525           HAMMER                   100.0
 1513           WHEEL GRINDER             92.0
 1511           BACK/ELEC GRINDER         88.0
 1499           WHEELABRATOR             100.0
 1494           SHAKEOUT TABLE            97.0
 1490           SHAKEOUT CONVEYOR        105.0
 1450           SHELL CORE                96.0
 1440           FURNACE                   93.0
 1436           INDUCT. FURNACE          100.0
 1374           MULLER                    91.0
 1336           SQUEZ/JOLT MOLDER         94.0
 1335           AUTO-MOLDER               94.0
 1117           PN DRILL GRINDER          95.0
```

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                              INPUT BACKGROUND DATA

SIC CODE:  332                    PLANT NO:  1                         DATE: 1979

BACK. GENERAL NAME              LEQ    EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                            DBA    CODE CONTR.   CODE CONTR.   CODE CONTR.

1526  BACK/HAMMER               85.0   1525  0.40    1513  0.30    1117  0.30
1485  BACK/SHAKEOUT             88.0   1490  0.50    1493  0.30    1499  0.20
1334  BACK/MOLDERS              85.0   1338  0.50    1335  0.30    1450  0.20
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1490	SHAKEOUT CONVEYOR	1	105.0	0.0
1438	INDUCT. FURNACE	1	100.0	0.0
1499	WHEELABRATOR	1	100.0	0.0
1494	SHAKEOUT TABLE	1	97.0	0.0
1450	SHELL CORE	1	96.0	0.0
1117	PN DRILL GRINDER	1	95.0	0.0
1335	AUTO-MOLDER	1	94.0	0.0
1338	SQUEZ/JOLT MOLDER	1	94.0	0.0
1440	FURNACE	1	93.0	0.0
1513	WHEEL GRINDER	1	92.0	0.0
1374	MULLER	1	91.0	0.0
1485	BACK/SHAKEOUT	1	88.0	0.0
1511	BACK/ELEC GRINDER	1	88.0	0.0
1334	BACK/MOLDERS	1	85.0	0.0
1526	BACK/HAMMER	1	85.0	0.0
1493	BACK. ONLY CONTR.	0	82.8	0.0

```
ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   963

          EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE =  332           PLANT NO. =  1          NO DATES SPECIFIE

EQUIP.        GENERIC NAME            NO. OF        MEAN          STD.
 CODE                                 SAMPLES      LEQ(DBA)       DEV.

 1484      SHAKEOUT/DUMPOUT              2           101.0         0.0
 1525      HAMMERING                     1           100.0         0.0
 1497      WHEELABRATOR                  1           100.0         0.0
 1434      FURNACE                       2            96.5         0.0
 1448      CORE OVEN                     1            96.0         0.0
 1103      PNEUMATIC GRINDER             1            95.0         0.0
 1333      MOLDER                        2            94.0         0.0
 1371      MULLER                        1            91.0         0.0
 1510      ELECTRIC GRINDERS             2            90.0         0.0
```

```
ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                         INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  332                    PLANT NO:  1                       DATE: 1979

 JOB    JOB DESCRIPTION           NO OF    TIME SPENT USING EQUIPMENT CODE
CODE                              PERS.  CODE  TIME   CODE  TIME   CODE  TIME

 467    WHELLABRATOR OPER             1  1499  60.0   1490  10.0   1494  20.0
                                         1485  10.0      0   0.0      0   0.0

 462    CUPOLA OPERATOR               1  1440  70.0   1485  30.0      0   0.0

 461    INSPECTOR                     1  1490  20.0   1525  20.0   1526  60.0

 459    SHIFTER                       3  1440  10.0   1438  10.0   1485  80.0

 450    DUMPOUT/SHAKEOUT OP           2  1490  70.0   1494  20.0   1485  10.0

 427    CORE GLUER                    1  1450  20.0   1334  80.0      0   0.0

 421    SHELL CORE OPERATOR           1  1450  70.0   1334  30.0      0   0.0

 385    MULLER OPER                   1  1374  60.0   1334  40.0      0   0.0

 367    POURER                        6  1440  30.0   1438  30.0   1485  40.0

 340    SQUEZ/JOLT MOLDER OP         14  1338  70.0   1334  30.0      0   0.0

 339    AUTO-MOLDER OPERATOR          2  1335  80.0   1334  20.0      0   0.0

 328    FURNACE CHARGER               1  1440  30.0   1438  30.0   1485  40.0

 327    INDUCT. FURNACE OPER          1  1436  70.0   1485  30.0      0   0.0

 280    WHEEL GRINDER OPER            6  1513  80.0   1511  20.0      0   0.0

 276    PN DRILL GRINDER OP           1  1117  80.0   1526  20.0      0   0.0

 202    FORKLIFT OPERATOR             2  1338  15.0   1440  15.0   1436  15.0
                                         1490  25.0   1485  30.0      0   0.0
```

```
ENVIRONMENTAL PROTECTION AGENCY                                BSN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332               PLANT NO. =  1            NO DATES SPECIFIED

 JOB        JOB DESCRIPTION            NO. OF    EQUIP.    WOR. MEAN    WOR. STD.
CODE                                   PERS.     CODE     TIME-8HRS    DEVIATION

46700    WHELLABRATOR OPER               1       1499        4.8          0.0
                                                 1490        0.8          0.0
                                                 1494        1.6          0.0
                                                 1435        0.8          0.0

46200    CUPOLA OPERATOR                 1       1440        5.6          0.0
                                                 1485        2.4          0.0

46100    INSPECTOR                       1       1490        1.6          0.0
                                                 1525        1.6          0.0
                                                 1526        4.8          0.0

45900    SHIFTER                         3       1440        0.8          0.0
                                                 1436        0.8          0.0
                                                 1485        6.4          0.0

45000    DUMPOUT/SHAKEOUT OP             2       1490        5.6          0.0
                                                 1494        1.6          0.0
                                                 1485        0.8          0.0

42700    CORE GLUER                      1       1450        1.6          0.0
                                                 1334        6.4          0.0

42100    SHELL CORE OPERATOR             1       1450        5.6          0.0
                                                 1334        2.4          0.0

38500    MULLER OPER                     1       1374        4.8          0.0
                                                 1334        3.2          0.0

36700    POURER                          6       1440        2.4          0.0
                                                 1436        2.4          0.0
                                                 1485        3.2          0.0

34000    SQUEEZ/JOLT MOLDER OP          14       1336        5.6          0.0
                                                 1334        2.4          0.0
```

```
ENVIRONMENTAL PROTECTION AGENCY                              BSN JOB NO.    9635

                     PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332              PLANT NO. =  1               NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF    EQUIP.     NOR. MEAN    NOR. STD.
CODE                                PERS.      CODE      TIME-8HRS    DEVIATION

33900   AUTO-MOLDER OPERATOR           2       1335         6.4          0.0
                                               1334         1.6          0.0

32800   FURNACE CHARGER                1       1440         2.4          0.0
                                               1438         2.4          0.0
                                               1485         3.2          0.0

32700   INDUCT. FURNACE OPER           1       1438         5.6          0.0
                                               1485         2.4          0.0

26000   WHEEL GRINDER OPER             6       1513         6.4          0.0
                                               1511         1.6          0.0

27600   PN DRILL GRINDER OP            1       1117         6.4          0.0
                                               1526         1.6          0.0

20200   FORKLIFT OPERATOR              2       1338         1.2          0.0
                                               1440         1.2          0.0
                                               1438         1.2          0.0
                                               1490         2.0          0.0
                                               1485         2.4          0.0
```

Plant No. 2

```
ENVIRONMENTAL PROTECTION AGENCY                              GEN JOB NO.   9635

                   INPUT EQUIPMENT DATA

SIC CODE:  332                   PLANT NO:  2                       DATE: 1979

EQUIP.           GENERIC NAME              LEQ
 CODE                                      DBA

 1517            STAND STONE GRIND         91.0
 1517            STAND STONE GRIND         92.0
 1503            RADIAL SAW               102.0
 1502            BAND SAW                  94.0
 1486            SHAKEOUT                  94.0
 1486            SHAKEOUT                  67.0
 1482            PN VIBRATOR              102.0
 1459            CORE SET LINE             93.0
 1451            NO-BAKE CORE              94.0
 1450            SHELL CORE                96.0
 1446            CRUCIBLE                  95.0
 1435            BACK/FURNACE              63.5
 1374            MULLER                    67.0
 1374            MULLER                    91.0
 1336            SQUEZ/JOLT MOLDER         96.0
 1194            ROTOBLAST                 56.0
 1146            PN TAMPER                 97.0
 1117            PN DRILL GRINDER          90.0
 1117            PN DRILL GRINDER          69.0
```

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                                  INPUT BACKGROUND DATA

SIC CODE:  332                         PLANT NO:  2                         DATE: 1979

BACK. GENERAL NAME             LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                           DBA   CODE CONTR.  CODE CONTR.  CODE CONTR.

1511  BACK/ELEC GRINDER        88.0  1513  1.00      0  0.0       0  0.0
1501  BACK/SAW/METAL           88.0  1502  1.00      0  0.0       0  0.0
1501  BACK/SAW/METAL           88.0  1503  0.40   1502  0.40   1482  0.20
1485  BACK/SHAKEOUT            86.0  1486  0.40   1374  0.30   1459  0.30
1485  BACK/SHAKEOUT            88.0  1486  1.00      0  0.0       0  0.0
1458  BACK/CORE SET LIN        88.0  1459  1.00      0  0.0       0  0.0
1449  BACK/CORE EQUIP          82.0  1450  0.50   1451  0.50      0  0.0
1445  BACK/CRUCIBLE            90.0  1446  1.00      0  0.0       0  0.0
1334  BACK/MOLDERS             87.0  1336  1.00      0  0.0       0  0.0
1145  BACK/PN TAMPER           88.0  1146  1.00      0  0.0       0  0.0
```

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1482	PN VIBRATOR	1	102.0	0.0
1503	RADIAL SAW	1	102.0	0.0
1338	SQUEZ/JOLT MOLDER	1	98.0	0.0
1146	PN TAMPER	1	97.0	0.0
1450	SHELL CORE	1	96.0	0.0
1446	CRUCIBLE	1	95.0	0.0
1451	NO-BAKE CORE	1	94.0	0.0
1502	BAND SAW	1	94.0	0.0
1459	CORE SET LINE	1	93.0	0.0
1517	STAND STONE GRIND	2	91.5	0.71
1486	SHAKEOUT	2	90.5	4.95
1445	BACK/CRUCIBLE	1	90.0	0.0
1117	PN DRILL GRINDER	2	89.5	0.71
1374	MULLER	2	89.0	2.83
1513	BACK. ONLY CONTR.	1	88.0	0.0
1145	BACK/PN TAMPER	1	88.0	0.0
1194	ROTOBLAST	1	88.0	0.0
1458	BACK/CORE SET LIN	1	88.0	0.0
1485	BACK/SHAKEOUT	2	88.0	0.0
1501	BACK/SAW/METAL	2	88.0	0.0
1511	BACK/ELEC GRINDER	1	88.0	0.0
1334	BACK/MOLDERS	1	87.0	0.0
1435	BACK/FURNACE	1	83.5	0.0
1449	BACK/CORE EQUIP	1	82.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 332 PLANT NO. = 2 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1480	PNEUMATIC VIBRATOR	1	102.0	0.0
1500	SAW/METAL	2	98.0	0.0
1333	MOLDER	1	98.0	0.0
1144	PNEUMATIC TAMPER	1	97.0	0.0
1448	CORE OVEN	2	95.0	0.0
1444	CRUCIBLE	1	95.0	0.0
1457	CORE SET LINE	1	93.0	0.0
1484	SHAKEOUT/DUMPOUT	2	90.5	4.95
1510	ELECTRIC GRINDERS	3	90.3	0.71
1103	PNEUMATIC GRINDER	2	89.5	0.71
1371	MULLER	2	89.0	2.83
1187	ABRASIVE BLASTING	1	88.0	0.0
1434	FURNACE	1	83.5	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332 PLANT NO: 2 DATE: 1979

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
504	RADIAL SAW OPERATOR	2	1503	60.0	1501	40.0	0	0.0
502	BAND SAW OPERATOR	2	1502	60.0	1501	40.0	0	0.0
440	SHAKEOUT OPERATOR	2	1486	80.0	1501	20.0	0	0.0
440	SHAKEOUT OPERATOR	4	1486	60.0	1485	40.0	0	0.0
426	CORE SETTER	3	1459	80.0	1485	20.0	0	0.0
422	NO-BAKE CORE OPER	5	1451	50.0	1449	50.0	0	0.0
421	SHELL CORE OPERATOR	5	1450	50.0	1449	50.0	0	0.0
402	ROTOBLAST OPERATOR	1	1194	30.0	1501	70.0	0	0.0
385	MULLER OPER	1	1374	70.0	1501	30.0	0	0.0
385	MULLER OPER	1	1374	70.0	1485	30.0	0	0.0
367	POURER	2	1446	20.0	1485	70.0	1435	10.0
367	POURER	2	1446	20.0	1501	70.0	1435	10.0
341	FLOOR MOLDER	2	1146	20.0	1501	70.0	1482	10.0
340	SQUEZ/JOLT MOLDER OP	4	1336	70.0	1334	30.0	0	0.0
325	FURNACE OPERATOR	4	1446	60.0	1445	20.0	1485	20.0
282	TRIM GRINDER OPER	4	1503	60.0	1501	40.0	0	0.0
281	STAND STONE GRINDER	4	1517	60.0	1501	40.0	0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                      PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332               PLANT NO. =  2              NO DATES SPECIFIED

 JOB       JOB DESCRIPTION           NO. OF    EQUIP.    NOR. MEAN    NOR. STD.
CODE                                 PERS.      CODE     TIME-8HRS    DEVIATION

50400   RADIAL SAW OPERATOR              2       1503        4.8          0.0
                                                 1501        3.2          0.0

50200   BAND SAW OPERATOR                2       1502        4.8          0.0
                                                 1501        3.2          0.0

44001   SHAKEOUT OPERATOR                4       1486        4.8          0.0
                                                 1485        3.2          0.0

44000   SHAKEOUT OPERATOR                2       1486        6.4          0.0
                                                 1501        1.6          0.0

42600   CORE SETTER                      3       1459        6.4          0.0
                                                 1485        1.6          0.0

42200   NO-BAKE CORE OPER                5       1451        4.0          0.0
                                                 1449        4.0          0.0

42100   SHELL CORE OPERATOR              5       1450        4.0          0.0
                                                 1449        4.0          0.0

40200   ROTOBLAST OPERATOR               1       1194        2.4          0.0
                                                 1501        5.6          0.0

38501   MULLER OPER                      1       1374        5.6          0.0
                                                 1485        2.4          0.0

38500   MULLER OPER                      1       1374        5.6          0.0
                                                 1501        2.4          0.0

36701   POURER                           2       1446        1.6          0.0
                                                 1501        5.6          0.0
                                                 1435        0.8          0.0

36700   POURER                           2       1446        1.6          0.0
                                                 1485        5.6          0.0
                                                 1435        0.8          0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
34100	FLOOR MOLDER	2	1146	1.6	0.0
			1501	5.6	0.0
			1482	0.8	0.0
34000	SQUEZ/JOLT MOLDER OP	4	1338	5.6	0.0
			1334	2.4	0.0
32500	FURNACE OPERATOR	4	1446	4.8	0.0
			1445	1.6	0.0
			1485	1.6	0.0
28200	TRIM GRINDER OPER	4	1503	4.8	0.0
			1501	3.2	0.0
28100	STAND STONE GRINDER	4	1517	4.8	0.0
			1501	3.2	0.0

Plant No. 3

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ENVIRONMENTAL PROTECTION AGENCY                               BBN JOB NO.   9635

                INPUT EQUIPMENT DATA

SIC CODE:  332                  PLANT NO:  3                    DATE: 1974

EQUIP.          GENERIC NAME              LEQ
 CODE                                     DBA

 1517           STAND STONE GRIND         91.0
 1512           SWING GRINDER             93.0
 1511           BACK/ELEC GRINDER         88.0
 1507           CUT-OFF WHEEL            102.0
 1499           WHEELABRATOR              89.0
 1494           SHAKEOUT TABLE           105.0
 1491           SHAKEOUT CONVEYOR         98.0
 1452           CORE OVEN                 82.0
 1450           SHELL CORE                94.0
 1436           INDUCT. FURNACE           87.0
 1437           ARC FURNACE              102.0
 1396           EXHAUST FAN               93.0
 1395           BACK/EXHAUST FAN          87.0
 1392           HYDRAULIC PUMP            96.0
 1387           SANDSLINGER               98.0
 1373           SANDMULLER                96.0
 1340           MOLDER-PACEMAKER          82.0
 1337           HI-PRESS. MOLDER          92.0
 1336           SHELL MOLDER              94.0
 1195           SPIRALBLAST               98.0
 1160           ARC AIR GOUGERS          102.0
 1146           PN TAMPER                 90.0
 1137           PN CHISEL                102.0
 1120           PN WHEEL GRINDER          95.0
 1119           PN CONE GRINDER           97.0
 1119           PN CONE GRINDER           96.0
 1119           PN CONE GRINDER           94.0
 1116           PN DISC GRINDER           99.0
 1116           PN DISC GRINDER           97.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9655

                              INPUT BACKGROUND DATA

SIC CODE:  332                        PLANT NO:  3                      DATE: 1979

BACK. GENERAL NAME            LEQ    EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                          DBA    CODE CONTR.  CODE CONTR.  CODE CONTR.

1506  BACK/CUTOFF WHEEL       85.0   1507  0.40   1118  0.30   1336  0.30
1506  BACK/CUTOFF WHEEL       85.0   1507  1.00      0  0.0       0  0.0
1485  BACK/SHAKEOUT           96.0   1493  1.00      0  0.0       0  0.0
1449  BACK/CORE EQUIP         78.0   1452  1.00      0  0.0       0  0.0
1435  BACK/FURNACE            85.0   1437  1.00      0  0.0       0  0.0
1435  BACK/FURNACE            85.0   1437  1.00      0  0.0       0  0.0
1334  BACK/MOLDERS            85.0   1336  0.50   1337  0.50      0  0.0
1159  BACK/WLD/BRN/GOUG       85.0   1160  1.00      0  0.0       0  0.0
1159  BACK/WLD/BRN/GOUG       85.0   1160  0.40   1450  0.30   1373  0.30
1136  BACK/PN CHISEL          85.0   1137  1.00      0  0.0       0  0.0
1136  BACK/PN CHISEL          85.0   1137  0.40   1491  0.30   1119  0.30
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1494	SHAKEOUT TABLE	1	105.0	0.0
1137	PN CHISEL	1	102.0	0.0
1160	ARC AIR GOUGERS	1	102.0	0.0
1437	ARC FURNACE	1	102.0	0.0
1507	CUT-OFF WHEEL	1	102.0	0.0
1493	BACK. ONLY CONTR.	0	98.0	0.0
1118	PN DISC GRINDER	2	98.0	1.41
1195	SPIRALBLAST	1	98.0	0.0
1387	SANDSLINGER	1	98.0	0.0
1485	BACK/SHAKEOUT	1	98.0	0.0
1491	SHAKEOUT CONVEYOR	1	98.0	0.0
1373	SANDMULLER	1	96.0	0.0
1119	PN CONE GRINDER	3	95.7	1.53
1336	SHELL MOLDER	1	94.0	0.0
1450	SHELL CORE	1	94.0	0.0
1120	PN WHEEL GRINDER	1	93.0	0.0
1396	EXHAUST FAN	1	93.0	0.0
1512	SWING GRINDER	1	93.0	0.0
1337	HI-PRESS. MOLDER	1	92.0	0.0
1517	STAND STONE GRIND	1	91.0	0.0
1146	PN TAMPER	1	90.0	0.0
1499	WHEELABRATOR	1	89.0	0.0
1511	BACK/ELEC GRINDER	1	88.0	0.0
1395	BACK/EXHAUST FAN	1	87.0	0.0
1438	INDUCT. FURNACE	1	87.0	0.0
1136	BACK/PN CHISEL	2	85.0	0.0
1159	BACK/WLD/BRN/GOUG	2	85.0	0.0
1334	BACK/MOLDERS	1	85.0	0.0
1435	BACK/FURNACE	2	85.0	0.0
1506	BACK/CUTOFF WHEEL	2	85.0	0.0
1340	MOLDER-PACEMAKER	1	82.0	0.0
1452	CORE OVEN	1	82.0	0.0
1449	BACK/CORE EQUIP	1	78.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 332 PLANT NO. = 3 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1505	CUT-OFF WHEEL	1	102.0	0.0
1158	WELD/BURN/GOUGING	1	102.0	0.0
1135	PNEUMATIC CHISEL	1	102.0	0.0
1484	SHAKEOUT/DUMPOUT	2	101.5	0.0
1385	SANDSLINGER	1	98.0	0.0
1187	ABRASIVE BLASTING	1	98.0	0.0
1392	HYDRAULIC PUMP	1	96.0	0.0
1371	MULLER	1	96.0	0.0
1103	PNEUMATIC GRINDER	6	96.0	1.49
1434	FURNACE	2	94.5	0.0
1510	ELECTRIC GRINDERS	3	90.7	0.0
1394	EXHAUST FAN	2	90.0	0.0
1144	PNEUMATIC TAMPER	1	90.0	0.0
1333	MOLDER	3	89.3	0[illegible]
1497	WHEELABRATOR	1	89.0	0[illegible]
1448	CORE OVEN	2	88.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9035

                         INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  332                   PLANT NO:  3                          DATE: 1979

 JOB    JOB DESCRIPTION           NO OF     TIME SPENT USING EQUIPMENT CODE
CODE                              PERS.  CODE   TIME  CODE   TIME  CODE   TIME

 505    CUT-OFF WHEEL OPER           2   1507   60.0  1506   30.0  1395   10.0

 467    WHELLABRATOR OPER            2   1499   60.0  1506   40.0     0    0.0

 443    SHAKEOUT TABLE OPER          2   1494   40.0  1435   20.0  1435   40.0

 433    CORE ROOM WORKER            17   1452   30.0  1449   70.0     0    0.0

 421    SHELL CORE OPERATOR          4   1450   50.0  1159   50.0     0    0.0

 405    SPIRALBLAST OPERATOR         1   1195   40.0  1435   30.0  1485   30.0

 395    SANDSLINGER OPERATOR         2   1387   15.0  1130   30.0  1485   40.0
                                         1494   15.0     0    0.0     0    0.0

 388    SANDMULLER OPERATOR          1   1373   80.0  1130   10.0  1491   10.0

 367    POURER                       4   1437   40.0  1435   40.0  1465   20.0

 350    MOLD WASH WORKER             1   1337   20.0  1491   20.0  1130   60.0

 342    PACEMAKER MOLDR OPER         1   1340   40.0  1435   20.0  1465   40.0

 338    SHELLMOLDER OPERATOR         4   1336   50.0  1506   50.0     0    0.0

 337    HI PRESS. MOLDER OP          2   1337   60.0  1506   20.0  1146    5.0
                                         1392    5.0  1491   10.0     0    0.0

 327    INDUCT. FURNACE OPER         2   1438   60.0  1159   40.0     0    0.0

 326    ARC FURNACE OPERATOR         1   1437   80.0  1435   20.0     0    0.0

 302    ARC-AIR OPERATOR             6   1160   50.0  1159   40.0  1395   10.0

 281    STAND STONE GRINDER          2   1517   60.0  1511   30.0  1395   10.0

 279    SWING GRINDER OPER           3   1512   70.0  1511   30.0     0    0.0
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ENVIRONMENTAL PROTECTION AGENCY                                GSN JOB NO.   9635

                        INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  332                    PLANT NO:  3                       DATE: 1979

 JOB    JOB DESCRIPTION          NO OF     TIME SPENT USING EQUIPMENT CODE
CODE                             PERS.  CODE   TIME   CODE   TIME   CODE   TIME

 276    PN CONE GRINDER OPER         3  1119   50.0   1506   40.0   1395   10.0

 277    PN DISC GRINDER OPER         4  1118   50.0   1506   40.0   1395   10.0

 275    PN GRINDER OPER              6  1120   50.0   1506   40.0   1395   10.0
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ENVIRONMENTAL PROTECTION AGENCY                          SBN JOB NO.   9635

                  PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332              PLANT NO. =  3           NO DATES SPECIFIED

 JOB        JOB DESCRIPTION        NO. OF    EQUIP.     NOR. MEAN    NOR. STD.
CODE                               PERS.      CODE     TIME-8HRS    DEVIATION

50500   CUT-OFF WHEEL OPER            2       1507        4.8          0.0
                                              1506        2.4          0.0
                                              1395        0.8          0.0

46700   WHELLABRATOR OPER             2       1499        4.8          0.0
                                              1506        3.2          0.0

44300   SHAKEOUT TABLE OPER           2       1494        3.2          0.0
                                              1485        1.6          0.0
                                              1435        3.2          0.0

43300   CORE ROOM WORKER             17       1452        2.4          0.0
                                              1449        5.6          0.0

42100   SHELL CORE OPERATOR           4       1450        4.0          0.0
                                              1159        4.0          0.0

40500   SPIRALBLAST OPERATOR          1       1195        3.2          0.0
                                              1435        2.4          0.0
                                              1485        2.4          0.0

39500   SANDSLINGER OPERATOR          2       1387        1.2          0.0
                                              1136        2.4          0.0
                                              1485        3.2          0.0
                                              1494        1.2          0.0

38800   SANDMULLER OPERATOR           1       1373        6.4          0.0
                                              1136        0.8          0.0
                                              1491        0.8          0.0

36700   POURER                        4       1437        3.2          0.0
                                              1435        3.2          0.0
                                              1485        1.6          0.0

35000   MOLD WASH WORKER              1       1337        1.6          0.0
                                              1491        1.6          0.0
                                              1136        4.8          0.0
```

ENVIRONMENTAL PROTECTION AGENCY BGN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
34200	PACEMAKER MOLDR OPER	1	1340	3.2	0.0
			1435	1.6	0.0
			1485	3.2	0.0
33800	SHELLMOLDER OPERATOR	4	1336	4.0	0.0
			1506	4.0	0.0
33700	HI PRESS. MOLDER OP	2	1337	4.8	0.0
			1506	1.6	0.0
			1140	0.4	0.0
			1392	0.4	0.0
			1491	0.8	0.0
32700	INDUCT. FURNACE OPER	2	1436	4.8	0.0
			1159	3.2	0.0
32600	ARC FURNACE OPERATOR	1	1437	6.4	0.0
			1435	1.6	0.0
30200	ARC-AIR OPERATOR	6	1160	4.0	0.0
			1159	3.2	0.0
			1395	0.8	0.0
28100	STAND STONE GRINDER	2	1517	4.8	0.0
			1511	2.4	0.0
			1395	0.8	0.0
27900	SWING GRINDER OPER	3	1512	5.6	0.0
			1511	2.4	0.0
27800	PN CONE GRINDER OPER	3	1119	4.0	0.0
			1506	3.2	0.0
			1395	0.8	0.0
27700	PN DISC GRINDER OPER	4	1118	4.0	0.0
			1506	3.2	0.0
			1395	0.8	0.0

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ENVIRONMENTAL PROTECTION AGENCY                        BBN JOB NO.   9635

                    PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332              PLANT NO. =  5            NO DATES SPECIFIED

 JOB        JOB DESCRIPTION          NO. OF   EQUIP.     NOR. MEAN    NOR. STD.
CODE                                 PERS.     CODE      TIME-8HRS    DEVIATION

27500   PN GRINDER OPER                 6      1120         4.0          0.0
                                               1506         3.2          0.0
                                               1395         0.8          0.0
```

Plant No. 4

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9855

INPUT EQUIPMENT DATA

SIC CODE: 332 PLANT NO: 4 DATE: 1979

EQUIP. CODE	GENERIC NAME	LEQ DBA
1517	STAND STONE GRIND	95.0
1517	STAND STONE GRIND	90.0
1513	WHEEL GRINDER	102.0
1507	CUT-OFF WHEEL	97.0
1507	CUT-OFF WHEEL	98.0
1486	SHAKEOUT	91.0
1450	SHELL CORE	96.0
1438	INDUCT. FURNACE	90.0
1438	INDUCT. FURNACE	90.0
1397	EXHAUST FAN	92.0
1374	MULLER	90.0
1374	MULLER	94.0
1338	SQUEZ/JOLT MOLDER	96.0
1338	SQUEZ/JOLT MOLDER	97.0
1335	AUTO-MOLDER	97.0
1194	ROTOBLAST	93.0
1194	ROTOBLAST	90.0
1117	PN DRILL GRINDER	91.0

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ENVIRONMENTAL PROTECTION AGENCY
                                                              BBN JOB NO.   9055

                              INPUT BACKGROUND DATA

SIC CODE:  332
                                   PLANT NO:  4
                                                                  DATE: 1979
BACK. GENERAL NAME                 LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                               DBA   CODE CONTR.  CODE CONTR.  CODE CONTR.

1511  BACK/ELEC GRINDER            88.0  1513  0.50   1507  0.30   1517  0.20
1511  BACK/ELEC GRINDER            88.0  1513  1.00      0  0.0       0  0.0
1506  BACK/CUTOFF WHEEL            88.0  1507  1.00      0  0.0       0  0.0
1506  BACK/CUTOFF WHEEL            88.0  1507  0.60   1117  0.20   1517  0.20
1485  BACK/SHAKEOUT                87.0  1338  0.40   1488  0.40   1335  0.20
1449  BACK/CORE EQUIP              87.0  1450  0.60   1452  0.40      0  0.0
1435  BACK/FURNACE                 87.0  1437  1.00      0  0.0       0  0.0
1395  BACK/EXHAUST FAN             87.0  1338  0.30   1397  0.50   1438  0.20
1372  BACK/MULLER                  87.0  1450  0.50   1374  0.50      0  0.0
1372  BACK/MULLER                  87.0  1450  0.40   1374  0.60      0  0.0
```

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1513	WHEEL GRINDER	1	102.0	0.0
1507	CUT-OFF WHEEL	2	97.5	0.71
1335	AUTO-MOLDER	1	97.0	0.0
1338	SQUEZ/JOLT MOLDER	2	96.5	0.71
1450	SHELL CORE	1	96.0	0.0
1517	STAND STONE GRIND	2	92.5	3.54
1374	MULLER	2	92.0	2.83
1397	EXHAUST FAN	1	92.0	0.0
1194	ROTOBLAST	2	91.5	2.12
1117	PN DRILL GRINDER	1	91.0	0.0
1486	SHAKEOUT	1	91.0	0.0
1438	INDUCT. FURNACE	2	90.0	0.0
1506	BACK/CUTOFF WHEEL	2	88.0	0.0
1511	BACK/ELEC GRINDER	2	88.0	0.0
1437	BACK. ONLY CONTR.	1	87.0	0.0
1372	BACK/MULLER	2	87.0	0.0
1395	BACK/EXHAUST FAN	1	87.0	0.0
1435	BACK/FURNACE	1	87.0	0.0
1449	BACK/CORE EQUIP	1	87.0	0.0
1485	BACK/SHAKEOUT	1	87.0	0.0
1452	BACK. ONLY CONTR.	1	83.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 96

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 332 PLANT NO. = 4 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1505	CUT-OFF WHEEL	2	97.5	0.71
1333	MOLDER	3	96.7	0.71
1510	ELECTRIC GRINDERS	3	95.7	3.54
1394	EXHAUST FAN	1	92.0	0.0
1371	MULLER	2	92.0	2.83
1187	ABRASIVE BLASTING	2	91.5	2.12
1484	SHAKEOUT/DUMPOUT	1	91.0	0.0
1103	PNEUMATIC GRINDER	1	91.0	0.0
1448	CORE OVEN	2	89.5	0.0
1434	FURNACE	3	89.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                       INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE:  332                    PLANT NO:  4                      DATE: 1979

 JOB    JOB DESCRIPTION          NO OF      TIME SPENT USING EQUIPMENT CODE
CODE                             PERS.   CODE   TIME  CODE   TIME  CODE   TIME

 505    CUT-OFF WHEEL OPER           2   1507   70.0  1372   30.0     0    0.0
 440    SHAKEOUT OPERATOR            6   1486   50.0  1372   20.0  1395   30.0
 421    SHELL CORE OPERATOR          8   1450   70.0  1372   30.0     0    0.0
 402    ROTOBLAST OPERATOR           2   1194   50.0  1372   30.0     0   20.0
 385    MULLER OPER                  1   1374   50.0  1372   20.0  1395   30.0
 368    MELTER/POURER                6   1438   50.0  1372   20.0  1395   30.0
 340    SQUEZ/JOLT MOLDER OP         7   1338   70.0  1372   30.0     0    0.0
 339    AUTO-MOLDER OPERATOR         2   1335   80.0  1372   20.0     0    0.0
 281    STAND STONE GRINDER          5   1517   40.0  1372   20.0  1117   40.0
 280    WHEEL GRINDER OPER           5   1513   40.0  1372   20.0  1117   40.0
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 4 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
50500	CUT-OFF WHEEL OPER	2	1507	5.6	0.0
			1372	2.4	0.0
44000	SHAKEOUT OPERATOR	8	1486	4.0	0.0
			1372	1.6	0.0
			1395	2.4	0.0
42100	SHELL CORE OPERATOR	8	1450	5.6	0.0
			1372	2.4	0.0
40200	ROTOBLAST OPERATOR	2	1194	4.0	0.0
			1372	2.4	0.0
38500	MULLER OPER	1	1374	4.0	0.0
			1372	1.6	0.0
			1395	2.4	0.0
36800	MELTER/POURER	6	1438	4.0	0.0
			1372	1.6	0.0
			1395	2.4	0.0
34000.	SQUEZ/JOLT MOLDER OP	7	1338	5.6	0.0
			1372	2.4	0.0
33900	AUTO-MOLDER OPERATOR	2	1335	6.4	0.0
			1372	1.6	0.0
28100	STAND STONE GRINDER	5	1517	3.2	0.0
			1372	1.6	0.0
			1117	3.2	0.0
28000	WHEEL GRINDER OPER	5	1513	3.2	0.0
			1372	1.6	0.0
			1117	3.2	0.0

Plant No. 5

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT EQUIPMENT DATA

SIC CODE: 332 PLANT NO: 5 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1802	FORKLIFT	83.0
1542	COMPRESSED AIR	105.0
1542	COMPRESSED AIR	89.0
1542	COMPRESSED AIR	92.0
1535	VENTILATION	83.0
1517	STAND STONE GRIND	89.0
1512	SWING GRINDER	93.7
1509	TABOR CUT-OFF WHL	95.0
1508	CUT-OFF WHEEL	100.0
1499	WHEELABRATOR	86.0
1499	WHEELABRATOR	89.0
1492	SHAKEOUT TABLE	102.0
1492	SHAKEOUT TABLE	98.0
1482	PN VIBRATOR	96.0
1477	HOIST	94.0
1471	BACK/OVERHD CRANE	90.0
1453	FLEXIBLO CORE MKR	98.0
1443	LADLE PRE-HEAT	88.0
1443	LADLE PRE-HEAT	85.0
1443	LADLE PRE-HEAT	95.0
1442	FURNACE	86.0
1438	INDUCT. FURNACE	86.0
1437	ARC FURNACE	103.0
1437	ARC FURNACE	96.0
1387	SANDSLINGER	98.0
1375	SAND HOPPER/VIB	100.0
1375	SAND HOPPER/VIB	97.0
1375	SAND HOPPER/VIB	100.0
1375	SAND HOPPER/VIB	97.0
1375	SAND HOPPER/VIB	94.0
1341	MOLDMASTER	104.0
1341	MOLDMASTER	100.0
1341	MOLDMASTER	99.0
1338	SQUEZ/JOLT MOLDER	110.0
1338	SQUEZ/JOLT MOLDER	118.0
1338	SQUEZ/JOLT MOLDER	104.0
1336	SHELL MOLDER	91.0
1336	SHELL MOLDER	96.0
1194	ROTOBLAST	97.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                 INPUT EQUIPMENT DATA

SIC CODE:  332                    PLANT NO:  5                  DATE: 1980

EQUIP.           GENERIC NAME              LEQ
 CODE                                      DBA

 1194            ROTOBLAST                 92.0
 1193            ABRASIVE BLAST            92.0
 1189            ABRASIVE BLAST            95.0
 1166            WELDING/ARC               83.0
 1160            ARC AIR GOUGERS          106.0
 1160            ARC AIR GOUGERS          105.0
 1160            ARC AIR GOUGERS          114.0
 1160            ARC AIR GOUGERS          106.0
 1159            BACK/WLD/BRN/GOUG         87.6
 1146            PN TAMPER                102.0
 1146            PN TAMPER                100.0
 1137            PN CHISEL                 97.0
 1137            PN CHISEL                 99.0
 1137            PN CHISEL                117.0
 1120            PN WHEEL GRINDER          98.0
 1120            PN WHEEL GRINDER          98.0
 1120            PN WHEEL GRINDER          91.0
 1120            PN WHEEL GRINDER          93.0
 1120            PN WHEEL GRINDER         101.0
 1120            PN WHEEL GRINDER          92.0
 1120            PN WHEEL GRINDER          96.0
 1120            PN WHEEL GRINDER          93.0
 1119            PN CONE GRINDER           92.0
 1119            PN CONE GRINDER           93.0
 1119            PN CONE GRINDER           95.0
 1119            PN CONE GRINDER           94.0
 1118            PN DISC GRINDER          103.0
 1118            PN DISC GRINDER           96.0
 1118            PN DISC GRINDER           98.0
 1117            PN DRILL GRINDER          95.0
 1117            PN DRILL GRINDER          96.0
 1117            PN DRILL GRINDER          93.0
 1117            PN DRILL GRINDER          92.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                             INPUT BACKGROUND DATA

SIC CODE:  332                   PLANT NO:  5                         DATE: 1980

BACK. GENERAL NAME            LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                          DBA   CODE CONTR.   CODE CONTR.   CODE CONTR.

1551  BACK/EXHAUST FAN        87.0  1552  0.70    1336  0.30       0  0.0
1543  BACK/COMPRSD AIR        89.0  1542  0.60    1120  0.40       0  0.0
1536  BACK/VENTILATION        81.0  1535  1.00       0  0.0        0  0.0
1536  BACK/VENTILATION        80.0  1535  1.00       0  0.0        0  0.0
1536  BACK/VENTILATION        69.0  1535  0.80    1387  0.20       0  0.0
1536  BACK/VENTILATION        64.0  1535  0.90    1120  0.10       0  0.0
1536  BACK/VENTILATION        64.0  1535  0.60    1118  0.20    1117  0.20
1536  BACK/VENTILATION        82.0  1535  0.60    1119  0.20    1120  0.20
1536  BACK/VENTILATION        83.0  1438  0.30    1535  0.70       0  0.0
1498  BACK/WHEELABRATOR       65.0  1499  0.80    1387  0.20       0  0.0
1498  BACK/WHEELABRATOR       66.0  1499  1.00       0  0.0        0  0.0
1465  BACK/SHAKEOUT           91.0  1492  0.70    1160  0.30       0  0.0
1481  BACK/PN VIBRATOR        76.0  1482  0.70    1336  0.30       0  0.0
1435  BACK/FURNACE            83.0  1438  1.00       0  0.0        0  0.0
1435  BACK/FURNACE            64.0  1442  1.00       0  0.0        0  0.0
1435  BACK/FURNACE            85.0  1437  0.80    1443  0.20       0  0.0
1435  BACK/FURNACE            69.0  1437  1.00       0  0.0        0  0.0
1435  BACK/FURNACE            85.0  1437  1.00       0  0.0        0  0.0
1435  BACK/FURNACE            86.0  1437  0.20    1443  0.80       0  0.0
1435  BACK/FURNACE            90.0  1443  1.00       0  0.0        0  0.0
1386  BACK/SANDSLINGER        82.0  1499  0.50    1387  0.50       0  0.0
1386  BACK/SANDSLINGER        88.0  1387  1.00       0  0.0        0  0.0
1386  BACK/SANDSLINGER        92.0  1387  1.00       0  0.0        0  0.0
1334  BACK/MOLDERS            82.0  1336  0.70    1482  0.30       0  0.0
1188  BACK/ABRASV BLAST       85.0  1194  0.50    1102  0.30    1160  0.20
1102  BACK/FIN/GRINDERS       84.0  1119  0.40    1117  0.40    1512  0.20
1102  BACK/FIN/GRINDERS       83.0  1517  0.40    1508  0.40    1166  0.20
1102  BACK/FIN/GRINDERS       82.0  1120  0.40    1118  0.30    1160  0.30
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1338	SQUEZ/JOLT MOLDER	3	110.7	7.02
1160	ARC AIR GOUGERS	4	107.8	4.19
1137	PN CHISEL	3	104.3	11.02
1146	PN TAMPER	2	101.0	1.41
1341	MOLDMASTER	3	101.0	2.65
1492	SHAKEOUT TABLE	2	100.0	2.83
1508	CUT-OFF WHEEL	1	100.0	0.0
1437	ARC FURNACE	2	99.5	4.95
1118	PN DISC GRINDER	3	99.0	3.61
1387	SANDSLINGER	1	98.0	0.0
1453	FLEXIBLO CORE MKR	1	98.0	0.0
1375	SAND HOPPER/VIB	5	97.6	2.51
1482	PN VIBRATOR	1	96.0	0.0
1542	COMPRESSED AIR	3	95.3	8.50
1120	PN WHEEL GRINDER	8	95.3	3.
1189	ABRASIVE BLAST	1	95.0	0.0
1509	TABOR CUT-OFF WHL	1	95.0	0.0
1194	ROTOBLAST	2	94.5	3.54
1117	PN DRILL GRINDER	4	94.0	1.83
1477	HOIST	1	94.0	0.0
1512	SWING GRINDER	1	93.7	0.0
1119	PN CONE GRINDER	4	93.5	1.29
1336	SHELL MOLDER	2	93.5	3.54
1193	ABRASIVE BLAST	1	92.0	0.0
1485	BACK/SHAKEOUT	1	91.0	0.0
1471	BACK/OVERHD CRANE	1	90.0	0.0
1443	LADLE PRE-HEAT	3	89.3	5.13
1517	STAND STONE GRIND	1	89.0	0.0
1543	BACK/COMPRSD AIR	1	89.0	0.0
1159	BACK/WLD/BRN/GOUG	1	87.8	0.0
1499	WHEELABRATOR	2	87.5	2.12
1386	BACK/SANDSLINGER	3	87.3	5.03
1551	BACK/EXHAUST FAN	1	87.0	0.0
1435	BACK/FURNACE	7	86.0	2.58
1438	INDUCT. FURNACE	1	86.0	0.0
1442	FURNACE	1	86.0	0.0
1498	BACK/WHEELABRATOR	2	85.5	0.71
1552	BACK. ONLY CONTR.	0	85.5	0.0
1188	BACK/ABRASV BLAST	1	85.0	0.0
1536	BACK/VENTILATION	7	83.3	2.93

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1102	BACK/FIN/GRINDERS	3	83.0	1.00
1166	WELDING/ARC	1	83.0	0.0
1535	VENTILATION	1	83.0	0.0
1802	FORKLIFT	1	83.0	0.0
1334	BACK/MOLDERS	1	82.0	0.0
1481	BACK/PN VIBRATOR	1	78.0	0.0

ENVIRONMENTAL PROTECTION AGENCY　　　　BBN JOB NO. 963

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 332　　　　PLANT NO. = 5　　　　NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1135	PNEUMATIC CHISEL	3	104.3	11.02
1333	MOLDER	8	102.7	5.00
1144	PNEUMATIC TAMPER	2	101.0	1.41
1158	WELD/BURN/GOUGING	6	100.3	4.19
1484	SHAKEOUT/DUMPOUT	2	100.0	2.83
1448	CORE OVEN	1	98.0	0.0
1385	SANDSLINGER	1	98.0	0.0
1371	MULLER	5	97.6	2.51
1505	CUT-OFF WHEEL	2	97.5	0.0
1480	PNEUMATIC VIBRATOR	1	96.0	0.0
1103	PNEUMATIC GRINDER	19	95.2	2.93
1187	ABRASIVE BLASTING	4	94.0	3.54
1460	LATHE	2	92.0	0.0
1510	ELECTRIC GRINDERS	2	91.3	0.0
1434	FURNACE	7	91.3	5[illegible]
1497	WHEELABRATOR	2	87.5	2.[illegible]2

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9655

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332 PLANT NO: 5 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
534	PRESS OPERATOR	2	1102	100.0	0	0.0	0	0.0
534	PRESS OPERATOR	4	1102	100.0	0	0.0	0	0.0
506	TABOR CUT-OFF SAW OP	2	1509	80.0	1102	20.0	0	0.0
505	CUT-OFF WHEEL OPER	2	1508	80.0	1102	20.0	0	0.0
480	OVERHEAD CRANE OPER	2	1471	100.0	0	0.0	0	0.0
480	OVERHEAD CRANE OPER	2	1471	50.0	1435	50.0	0	0.0
480	OVERHEAD CRANE OPER	2	1471	40.0	1386	50.0	1485	10.0
480	OVERHEAD CRANE OPER	2	1471	30.0	1102	40.0	1188	30.0
467	WHEELABRATOR OPER	4	1499	85.0	1102	15.0	0	0.0
461	INSPECTOR	2	1102	70.0	1000	20.0	1159	10.0
443	SHAKEOUT TABLE OPER	4	1492	75.0	1485	25.0	0	0.0
404	MACHINE BLASTER	4	1193	75.0	1188	25.0	0	0.0
403	HAND BLASTER	2	1189	50.0	1188	25.0	1102	25.0
402	ROTOBLAST OPERATOR	2	1194	75.0	1188	25.0	0	0.0
402	ROTOBLAST OPERATOR	2	1194	85.0	1102	15.0	0	0.0
367	POURER	6	1435	40.0	1485	30.0	1536	15.0
			1334	10.0	1461	5.0	0	0.0
343	MOLDMASTER OPERATOR	6	1341	35.0	1375	35.0	1536	30.0
341	FLOOR MOLDER	2	1435	100.0	0	0.0	0	0.0
341	FLOOR MOLDER	4	1386	80.0	1485	15.0	1471	5.0

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332 PLANT NO: 5 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
341	FLOOR MOLDER	4	1146	30.0	1366	40.0	1465	30.0
341	FLOOR MOLDER	4	1146	30.0	1435	70.0	0	0.0
331	LADLE SKIMMER	2	1465	50.0	1536	20.0	1435	20.0
			1334	5.0	1461	5.0	0	0.0
331	LADLE SKIMMER	2	1435	30.0	1386	30.0	1536	30.0
			1334	5.0	1461	5.0	0	0.0
330	LADLE PRE-HEATER	2	1435	90.0	1465	10.0	0	0.0
330	LADLE PRE-HEATER	2	1435	80.0	1137	20.0	0	0.0
330	LADLE PRE-HEATER	2	1435	100.0	0	0.0	0	0.0
326	ARC FURNACE OPERATOR	4	1437	70.0	1435	30.0	0	0.0
319	POWDER BURNER	2	1160	65.0	1102	35.0	0	0.0
318	GAS BURNER	2	1160	65.0	1102	35.0	0	0.0
310	ARC AIR GOUGER	2	1160	50.0	1159	30.0	1102	20.0
310	ARC AIR GOUGER	2	1160	70.0	1159	30.0	0	0.0
310	ARC AIR GOUGER	4	1160	70.0	1102	30.0	0	0.0
310	ARC AIR GOUGER	2	1160	80.0	1517	20.0	0	0.0
303	ARC WELDER/A	10	1166	70.0	1159	20.0	1160	10.0
303	ARC WELDER/A	4	1166	80.0	1159	15.0	1102	5.0
303	ARC WELDER/A	2	1166	70.0	1159	30.0	0	0.0
303	ARC WELDER/A	10	1166	60.0	1102	25.0	1160	15.0

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO. 9035

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332   PLANT NO: 5   DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
261	STAND STONE GRINDER	10	1517	80.0	1102	20.0	0	0.0
279	SWING GRINDER OPER	4	1512	80.0	1102	20.0	0	0.0
275	PN GRINDER OPER	22	1120	15.0	1119	15.0	1118	15.0
			1117	15.0	1102	40.0	0	0.0
275	PN GRINDER OPER	4	1120	20.0	1119	5.0	1118	5.0
			1117	5.0	1102	65.0	0	0.0
275	PN GRINDER OPER	12	1120	20.0	1119	20.0	1118	15.0
			1117	15.0	1102	30.0	0	0.0
275	PN GRINDER OPER	24	1102	50.0	1117	10.0	1118	10.0
			1119	10.0	1120	20.0	0	0.0
266	HELPER	6	1386	90.0	1485	10.0	0	0.0
265	LABORER	2	1435	100.0	0	0.0	0	0.0
265	LABORER	2	1435	50.0	1102	10.0	1536	10.0
			1485	10.0	1386	20.0	0	0.0
265	LABORER	2	1000	100.0	0	0.0	0	0.0
264	SERVICEMAN	2	1188	50.0	1102	50.0	0	0.0
264	SERVICEMAN	2	1102	50.0	1188	15.0	1159	25.0
			1000	10.0	0	0.0	0	0.0
264	SERVICEMAN	4	1193	75.0	1188	25.0	0	0.0
264	SERVICEMAN	2	1102	20.0	1334	40.0	1536	40.0
264	SERVICEMAN	2	1386	60.0	1535	40.0	0	0.0
264	SERVICEMAN	2	1102	50.0	1159	50.0	0	0.0

ENVIRONMENTAL PROTECTION AGENCY BEN JOB NO. 9035

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332 PLANT NO: 5 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	TIME	CODE	TIME	CODE	TIME
264	SERVICEMAN	4	1102	30.0	1159	30.0	1194	40.0
264	SERVICEMAN	2	1000	40.0	1386	30.0	1536	30.0
264	SERVICEMAN	2	1000	40.0	1334	20.0	1536	20.0
			1481	10.0	1543	10.0	0	0.0
264	SERVICEMAN	4	1000	25.0	1334	25.0	1536	45.0
			1481	5.0	0	0.0	0	0.0
264	SERVICEMAN	2	1435	100.0	0	0.0	0	0.0
203	WORKSAVER OPERATOR	6	1188	20.0	1102	60.0	1159	20.0
202	FORKLIFT OPERATOR	2	1000	25.0	1465	30.0	1498	25.0
			1602	20.0	0	0.0	0	0.0
202	FORKLIFT OPERATOR	2	1000	90.0	1435	10.0	0	0.0
202	FORKLIFT OPERATOR	2	1000	40.0	1435	10.0	1536	30.0
			1334	10.0	1341	10.0	0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                       PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332             PLANT NO. =  5            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION         NO. OF    EQUIP.    NOR. MEAN    NOR. STD.
CODE                               PERS.     CODE     TIME-8HRS    DEVIATION

53400   PRESS OPERATOR                 6      1102         8.0          0.0

50600   TABOR CUT-OFF SAW OP           2      1509         6.4          0.0
                                              1102         1.6          0.0

50500   CUT-OFF WHEEL OPER             2      1508         6.4          0.0
                                              1102         1.6          0.0

48003   OVERHEAD CRANE OPER            2      1471         2.4          0.0
                                              1102         3.2          0.0
                                              1188         2.4          0.0

48002   OVERHEAD CRANE OPER            2      1471         3.2          0.0
                                              1386         4.0          0.0
                                              1485         0.8          0.0

48001   OVERHEAD CRANE OPER            2      1471         4.0          0.0
                                              1435         4.0          0.0

48000   OVERHEAD CRANE OPER            2      1471         8.0          0.0

46700   WHELLABRATOR OPER              4      1499         6.8          0.0
                                              1102         1.2          0.0

46100   INSPECTOR                      2      1102         5.6          0.0
                                              1000         1.6          0.0
                                              1159         0.8          0.0

44300   SHAKEOUT TABLE OPER            4      1492         6.0          0.0
                                              1485         2.0          0.0

40400   MACHINE BLASTER                4      1193         6.0          0.0
                                              1188         2.0          0.0

40300   HAND BLASTER                   2      1189         4.0          0.0
                                              1188         2.0          0.0
                                              1102         2.0          0.0
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ENVIRONMENTAL PROTECTION AGENCY

BSN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
40201	ROTOBLAST OPERATOR	2	1194	6.8	0.0
			1102	1.2	0.0
40200	ROTOBLAST OPERATOR	2	1194	6.0	0.0
			1186	2.0	0.0
36700	POURER	8	1435	3.2	0.0
			1485	2.4	0.0
			1536	1.2	0.0
			1334	0.8	0.0
			1481	0.4	0.0
34300	MOLDMASTER OPERATOR	6	1341	2.8	0.0
			1375	2.8	0.0
			1536	2.4	0.0
34103	FLOOR MOLDER	4	1146	2.4	0.0
			1435	5.6	0.0
34102	FLOOR MOLDER	4	1146	2.4	0.0
			1386	3.2	0.0
			1485	2.4	0.0
34101	FLOOR MOLDER	4	1386	6.4	0.0
			1485	1.2	0.0
			1471	0.4	0.0
34100	FLOOR MOLDER	2	1435	8.0	0.0
33101	LADLE SKIMMER	2	1435	2.4	0.0
			1386	2.4	0.0
			1536	2.4	0.0
			1334	0.4	0.0
			1481	0.4	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
33100	LADLE SKIMMER	2	1485	4.0	0.0
			1536	1.6	0.0
			1435	1.6	0.0
			1334	0.4	0.0
			1481	0.4	0.0
33002	LADLE PRE-HEATER	2	1435	8.0	0.0
33001	LADLE PRE-HEATER	2	1435	6.4	0.0
			1137	1.6	0.0
33000	LADLE PRE-HEATER	2	1435	7.2	0.0
			1485	0.8	0.0
32600	ARC FURNACE OPERATOR	4	1437	5.6	0.0
			1435	2.4	0.0
31900	POWDER BURNER	2	1160	5.2	0.0
			1102	2.8	0.0
31800	GAS BURNER	2	1160	5.2	0.0
			1102	2.8	0.0
31003	ARC AIR GOUGER	2	1160	6.4	0.0
			1517	1.6	0.0
31002	ARC AIR GOUGER	4	1160	5.6	0.0
			1102	2.4	0.0
31001	ARC AIR GOUGER	2	1160	5.6	0.0
			1159	2.4	0.0
31000	ARC AIR GOUGER	2	1160	4.0	0.0
			1159	2.4	0.0
			1102	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY GCA JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-EHRS	WOR. STD. DEVIATION
30303	ARC WELDER/A	10	1166	4.6	0.0
			1102	2.0	0.0
			1160	1.2	0.0
30302	ARC WELDER/A	2	1166	5.6	0.0
			1159	2.4	0.0
30301	ARC WELDER/A	4	1166	6.4	0.0
			1159	1.2	0.0
			1102	0.4	0.0
30300	ARC WELDER/A	10	1166	5.6	0.0
			1159	1.6	0.0
			1160	0.8	0.0
28100	STAND STONE GRINDER	10	1517	6.4	0.0
			1102	1.6	0.0
27900	SWING GRINDER OPER	4	1512	6.4	0.0
			1102	1.6	0.0
27500	PN GRINDER OPER	62	1120	1.5	0.19
			1119	1.1	0.35
			1118	1.0	0.25
			1117	1.0	0.25
			1102	3.5	0.75
26600	HELPER	6	1386	7.2	0.0
			1485	0.8	0.0
26502	LABORER	2	1000	8.0	0.0
26501	LABORER	2	1435	4.0	0.0
			1102	0.6	0.0
			1536	0.8	0.0
			1485	0.5	0.0
			1386	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332   PLANT NO. = 5   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26500	LABORER	2	1435	8.0	0.0
26410	SERVICEMAN	2	1435	8.0	0.0
26409	SERVICEMAN	4	1000	2.0	0.0
			1334	2.0	0.0
			1536	3.6	0.0
			1481	0.4	0.0
26408	SERVICEMAN	2	1000	3.2	0.0
			1334	1.6	0.0
			1536	1.6	0.0
			1481	0.8	0.0
			1543	0.8	0.0
26407	SERVICEMAN	2	1000	3.2	0.0
			1386	2.4	0.0
			1536	2.4	0.0
26406	SERVICEMAN	4	1102	2.4	0.0
			1159	2.4	0.0
			1194	3.2	0.0
26405	SERVICEMAN	2	1102	4.0	0.0
			1159	4.0	0.0
26404	SERVICEMAN	2	1386	4.8	0.0
			1536	3.2	0.0
26403	SERVICEMAN	2	1102	1.6	0.0
			1334	3.2	0.0
			1536	3.2	0.0
26402	SERVICEMAN	4	1193	6.0	0.0
			1188	2.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BDM JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26401	SERVICEMAN	2	1102	4.0	0.0
			1188	1.2	0.0
			1159	2.0	0.0
			1000	0.8	0.0
26400	SERVICEMAN	2	1188	4.0	0.0
			1102	4.0	0.0
20300	WORKSAVER OPERATOR	6	1188	1.6	0.0
			1102	4.8	0.0
			1159	1.6	0.0
20202	FORKLIFT OPERATOR	2	1000	3.2	0.0
			1435	0.8	0.0
			1538	2.4	0.0
			1334	0.8	0.0
			1341	0.8	0.0
20201	FORKLIFT OPERATOR	2	1000	7.2	0.0
			1435	0.8	0.0
20200	FORKLIFT OPERATOR	2	1000	2.0	0.0
			1435	2.4	0.0
			1498	2.0	0.0
			1502	1.6	0.0

Plant No. 6

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9535

              INPUT EQUIPMENT DATA

SIC CODE:  332                  PLANT NO:  6                     DATE: 1980

EQUIP.        GENERIC NAME             LEQ
 CODE                                  DBA

 1517         STAND STONE GRIND        88.0
 1517         STAND STONE GRIND        91.0
 1499         WHEELABRATOR             90.2
 1483         PN VIBRATOR             105.0
 1482         PN VIBRATOR              96.0
 1440         FURNACE                  86.0
 1373         SANDMULLER               75.0
 1339         MOLDER                   91.0
 1338         SQUEZ/JOLT MOLDER        96.0
 1338         SQUEZ/JOLT MOLDER        97.0
 1338         SQUEZ/JOLT MOLDER        92.0
 1338         SQUEZ/JOLT MOLDER       103.0
 1194         ROTOBLAST                92.0
 1175         WELD/ACETYLENE           86.0
 1146         PN TAMPER                93.0
 1146         PN TAMPER                92.0
 1146         PN TAMPER                92.0
 1120         PN WHEEL GRINDER         95.0
 1120         PN WHEEL GRINDER         95.0
 1120         PN WHEEL GRINDER         98.0
 1120         PN WHEEL GRINDER         94.0
 1120         PN WHEEL GRINDER         95.0
 1120         PN WHEEL GRINDER         98.0
 1119         PN CONE GRINDER          95.0
 1119         PN CONE GRINDER          95.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   963

            EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE =  332             PLANT NO. =  6             NO DATES SPECIFIE

EQUIP.        GENERIC NAME            NO. OF          MEAN         STD.
 CODE                                 SAMPLES        LEQ(DBA)      DEV.

 1480       PNEUMATIC VIBRATOR           2            101.5        0.0
 1333       MULDER                       5             95.8        4.55
 1103       PNEUMATIC GRINDER            8             95.6        1.57
 1144       PNEUMATIC TAMPER             3             92.3        0.58
 1187       ABRASIVE BLASTING            1             92.0        0.0
 1510       ELECTRIC GRINDERS            3             90.3        2.08
 1497       WHEELABRATOR                 1             90.2        0.0
 1434       FURNACE                      1             86.0        0.0
 1158       WELD/BURN/GOUGING            1             86.0        0.0
 1371       MULLER                       1             75.0        0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1483	PN VIBRATOR	1	105.0	0.0
1482	PN VIBRATOR	1	98.0	0.0
1338	SQUEZ/JOLT MOLDER	4	97.0	4.55
1120	PN WHEEL GRINDER	6	95.8	1.72
1119	PN CONE GRINDER	2	95.0	0.0
1146	PN TAMPER	3	92.3	0.58
1194	ROTOBLAST	1	92.0	0.0
1339	MOLDER	1	91.0	0.0
1517	STAND STONE GRIND	3	90.3	2.08
1499	WHEELABRATOR	1	90.2	0.0
1104	BACK/PN GRINDER	1	88.0	0.0
1175	WELD/ACETYLENE	1	86.0	0.0
1440	FURNACE	1	86.0	0.0
1372	BACK/MULLER	1	79.0	0.0
1145	BACK/PN TAMPER	1	78.0	0.0
1435	BACK/FURNACE	5	77.0	3.24
1551	BACK/EXHAUST FAN	2	76.0	4.24
1373	SANDMULLER	1	75.0	0.0
1552	BACK. ONLY CONTR.	3	74.1	4.24
1543	BACK/COMPRSD AIR	2	74.0	4.24
1542	BACK. ONLY CONTR.	1	69.0	4.24

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ENVIRONMENTAL PROTECTION AGENCY                             BBN JOB NO.   9635

                              INPUT BACKGROUND DATA

SIC CODE:  332                    PLANT NO:  6                           DATE: 1980

BACK. GENERAL NAME           LEQ    EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                         DBA    CODE CONTR.   CODE CONTR.   CODE CONTR.

1551  BACK/EXHAUST FAN       79.0   1552  0.70    1440  0.30       0  0.0
1551  BACK/EXHAUST FAN       73.0   1552  0.60    1542  0.40       0  0.0
1543  BACK/COMPRSD AIR       77.0   1542  1.00       0  0.0        0  0.0
1543  BACK/COMPRSD AIR       71.0   1542  1.00       0  0.0        0  0.0
1435  BACK/FURNACE           79.0   1440  1.00       0  0.0        0  0.0
1435  BACK/FURNACE           80.0   1440  1.00       0  0.0        0  0.0
1435  BACK/FURNACE           74.0   1440  1.00       0  0.0        0  0.0
1435  BACK/FURNACE           79.0   1440  1.00       0  0.0        0  0.0
1435  BACK/FURNACE           73.0   1440  1.00       0  0.0        0  0.0
1372  BACK/MULLER            79.0   1373  0.40    1552  0.40    1440  0.20
1145  BACK/PN TAMPER         76.0   1146  0.60    1440  0.40       0  0.0
1104  BACK/PN GRINDER        88.0   1517  0.20    1120  0.60    1194  0.20
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332

PLANT NO: 6

DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE					
			CODE	TIME	CODE	TIME	CODE	TIME
429	OIL-BAKE COREMAKER	2	1483	2.0	1551	98.0	0	0.0
422	NO-BAKE CORE OPER	1	1551	100.0	0	0.0	0	0.0
422	NO-BAKE CORE OPER	1	1543	100.0	0	0.0	0	0.0
402	ROTOBLAST OPERATOR	1	1194	15.0	1499	15.0	1104	70.0
385	MULLER OPER	1	1372	10.0	1145	24.0	1435	56.0
			1543	10.0	0	0.0	0	0.0
341	FLOOR MOLDER	4	1145	30.0	1435	70.0	0	0.0
340	SQUEZ/JOLT MOLDER OP	5	1146	6.0	1338	4.0	1462	4.0
			1145	26.0	1435	60.0	0	0.0
329	CUPOLA FURNACE OPER	2	1440	70.0	1435	30.0	0	0.0
307	ACETYLENE WELDER	1	1175	15.0	1104	50.0	1000	35.0
275	PN GRINDER OPER	1	1517	50.0	1104	50.0	0	0.0
275	PN GRINDER OPER	3	1119	15.0	1120	35.0	1104	50.0
270	FOREMAN	1	1104	20.0	1175	10.0	1440	20.0
			1435	40.0	1543	10.0	0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                      PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332              PLANT NO. =  6             NO DATES SPECIFIED

 JOB       JOB DESCRIPTION            NO. OF     EQUIP.      NOR. MEAN     NOR. STD.
CODE                                  PERS.      CODE       TIME-8HRS     DEVIATION

42900   OIL-BAKE COREMAKER               2        1483           0.2           0.0
                                                  1551           7.8           0.0

42201   NO-BAKE CORE OPER                1        1543           8.0           0.0

42200   NO-BAKE CORE OPER                1        1551           8.0           0.0

40200   ROTOBLAST OPERATOR               1        1194           1.2           0.0
                                                  1499           1.2           0.0
                                                  1104           5.6           0.0

38500   MULLER OPER                      1        1372           0.8           0.0
                                                  1145           1.9           0.0
                                                  1435           4.5           0.0
                                                  1543           0.8           0.0

34100   FLOOR MOLDER                     4        1145           2.4           0.0
                                                  1435           5.6           0.0

34000   SQUEZ/JOLT MOLDER OP             5        1146           0.5           0.0
                                                  1338           0.3           0.0
                                                  1482           0.3           0.0
                                                  1145           2.1           0.0
                                                  1435           4.8           0.0

32900   CUPOLA FURNACE OPER              2        1440           5.6           0.0
                                                  1435           2.4           0.0

30700   ACETYLENE WELDER                 1        1175           1.2           0.0
                                                  1104           4.0           0.0
                                                  1000           2.8           0.0

27501   PN GRINDER OPER                  3        1119           1.2           0.0
                                                  1120           2.8           0.0
                                                  1104           4.0           0.0
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ENVIRONMENTAL PROTECTION AGENCY BGN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
27500	PN GRINDER OPER	1	1517	4.0	0.0
			1104	4.0	0.0
27000	FOREMAN	1	1104	1.6	0.0
			1175	0.8	0.0
			1440	1.6	0.0
			1435	3.2	0.0
			1543	0.8	0.0

Plant No. 7

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

INPUT EQUIPMENT DATA

SIC CODE: 332 PLANT NO: 7 DATE: 1980

EQUIP. CODE	GENERIC NAME	LEQ DBA
1802	FORKLIFT	86.0
1802	FORKLIFT	88.0
1542	COMPRESSED AIR	94.0
1542	COMPRESSED AIR	94.0
1542	COMPRESSED AIR	94.0
1542	COMPRESSED AIR	92.0
1542	COMPRESSED AIR	97.0
1535	VENTILATION	82.0
1525	HAMMER	92.0
1517	STAND STONE GRIND	96.0
1512	SWING GRINDER	94.0
1512	SWING GRINDER	94.0
1508	CUT-OFF WHEEL	100.0
1508	CUT-OFF WHEEL	100.0
1499	WHEELABRATOR	87.0
1492	SHAKEOUT TABLE	100.0
1492	SHAKEOUT TABLE	102.0
1492	SHAKEOUT TABLE	106.0
1492	SHAKEOUT TABLE	96.0
1486	SHAKEOUT	89.0
1486	SHAKEOUT	93.0
1486	SHAKEOUT	96.0
1457	CORE SET LINE	94.0
1451	NO-BAKE CORE	96.0
1450	SHELL CORE	93.0
1443	LADLE PRE-HEAT	92.0
1443	LADLE PRE-HEAT	90.0
1442	FURNACE	88.0
1436	INDUCT. FURNACE	88.0
1438	INDUCT. FURNACE	96.0
1373	SANDMULLER	92.0
1338	SQUEZ/JOLT MOLDER	98.0
1338	SQUEZ/JOLT MOLDER	95.0
1338	SQUEZ/JOLT MOLDER	103.0
1338	SQUEZ/JOLT MOLDER	103.0
1338	SQUEZ/JOLT MOLDER	100.0
1338	SQUEZ/JOLT MOLDER	95.0
1334	BACK/MOLDERS	84.0
1166	WELDING/ARC	85.0

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

              INPUT EQUIPMENT DATA

SIC CODE:  332                         PLANT NO:  7                       DATE: 1980

EQUIP.          GENERIC NAME                 LEQ
 CODE                                        DBA

 1166          WELDING/ARC                   79.0
 1166          WELDING/ARC                   65.0
 1160          ARC AIR GOUGERS              106.0
 1160          ARC AIR GOUGERS              104.0
 1144          PNEUMATIC TAMPER              97.0
 1120          PN WHEEL GRINDER              95.5
 1119          PN CONE GRINDER               94.0
 1119          PN CONE GRINDER               99.0
 1119          PN CONE GRINDER              100.0
 1119          PN CONE GRINDER               97.0
 1119          PN CONE GRINDER               95.0
 1116          PN DISC GRINDER              101.0
 1118          PN DISC GRINDER              104.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                              INPUT BACKGROUND DATA

SIC CODE:   332                    PLANT NO:  7                      DATE: 1980

BACK. GENERAL NAME               LEQ   EQUIPMENT CONTRIBUTION TO BACKGROUND
CODE                             DBA   CODE CONTR.   CODE CONTR.   CODE CONTR.

1543  BACK/COMPRSD AIR           87.0  1542  0.90    1552  0.10       0  0.0
1543  BACK/COMPRSD AIR           89.0  1542  0.60    1544  0.40       0  0.0
1543  BACK/COMPRSD AIR           90.0  1544  0.60    1535  0.40       0  0.0
1536  BACK/VENTILATION           85.0  1552  0.40    1443  0.30    1438  0.30
1536  BACK/VENTILATION           82.0  1552  0.40    1443  0.30    1486  0.30
1506  BACK/CUTOFF WHEEL          90.0  1508  0.70    1542  0.20    1602  0.10
1506  BACK/CUTOFF WHEEL          93.0  1508  0.60    1542  0.40       0  0.0
1485  BACK/SHAKEOUT              86.0  1486  0.80    1542  0.20       0  0.0
1485  BACK/SHAKEOUT              90.0  1492  0.60    1160  0.40       0  0.0
1485  BACK/SHAKEOUT              88.0  1486  0.80    1535  0.20       0  0.0
1485  BACK/SHAKEOUT              89.0  1486  0.60    1535  0.30    1443  0.10
1435  BACK/FURNACE               86.0  1443  0.60    1438  0.30    1535  0.10
1435  BACK/FURNACE               87.0  1552  0.30    1443  0.50    1438  0.20
1435  BACK/FURNACE               82.0  1442  0.70    1544  0.30       0  0.0
1435  BACK/FURNACE               85.0  1438  0.50    1535  0.30    1338  0.10
1159  BACK/WLD/BRN/GOUG          90.0  1160  0.60    1535  0.40       0  0.0
1159  BACK/WLD/BRN/GOUG          91.0  1160  0.60    1508  0.20       0  0.0
1104  BACK/PN GRINDER            90.0  1118  0.70    1535  0.30       0  0.0
1104  BACK/PN GRINDER            89.0  1119  0.70    1535  0.30       0  0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 963

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIE

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1160	ARC AIR GOUGERS	2	106.0	2.83
1118	PN DISC GRINDER	2	102.5	2.12
1492	SHAKEOUT TABLE	4	101.5	3.42
1508	CUT-OFF WHEEL	2	100.0	0.0
1338	SQUEZ/JOLT MOLDER	6	99.0	3.63
1119	PN CONE GRINDER	5	97.0	2.55
1451	NO-BAKE CORE	1	96.0	0.0
1517	STAND STONE GRIND	1	96.0	0.0
1120	PN WHEEL GRINDER	1	95.3	0.0
1542	COMPRESSED AIR	5	94.2	1.79
1512	SWING GRINDER	2	94.0	0.0
1450	SHELL CORE	1	93.0	0.0
1486	SHAKEOUT	3	92.7	3.51
1373	SANDMULLER	1	92.0	0.0
1438	INDUCT. FURNACE	2	92.0	5[illegible]
1506	BACK/CUTOFF WHEEL	2	91.5	2.12
1443	LADLE PRE-HEAT	2	91.0	1.41
1159	BACK/WLD/BRN/GOUG	2	90.5	0.71
1104	BACK/PN GRINDER	2	89.5	0.71
1543	BACK/COMPRSD AIR	3	88.7	1.53
1485	BACK/SHAKEOUT	4	88.3	1.71
1442	FURNACE	1	88.0	0.0
1499	WHEELABRATOR	1	87.0	0.0
1802	FORKLIFT	2	87.0	1.41
1435	BACK/FURNACE	4	85.5	2.65
1334	BACK/MOLDERS	1	84.8	0.0
1544	BACK. ONLY CONTR.	0	83.9	1.53
1536	BACK/VENTILATION	2	83.5	2.12
1166	WELDING/ARC	3	83.0	3.46
1535	VENTILATION	1	82.0	0.0
1552	BACK. ONLY CONTR.	0	73.9	1.53

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1505	CUT-OFF WHEEL	2	100.0	0.0
1103	PNEUMATIC GRINDER	8	98.2	2.47
1484	SHAKEOUT/DUMPOUT	7	97.7	3.45
1144	PNEUMATIC TAMPER	1	97.0	0.0
1333	MOLDER	7	97.0	3.63
1510	ELECTRIC GRINDERS	3	94.7	0.0
1448	CORE OVEN	2	94.5	0.0
1457	CORE SET LINE	1	94.0	0.0
1158	WELD/BURN/GOUGING	5	92.2	3.27
1525	HAMMERING	1	92.0	0.0
1371	MULLER	1	92.0	0.0
1434	FURNACE	5	90.8	4.12
1497	WHEELABRATOR	1	87.0	0.0

ENVIRONMENTAL PROTECTION AGENCY DBN JOB NO. 9635

INPUT PERSONNEL WORK ASSIGNMENTS

SIC CODE: 332 PLANT NO: 7 DATE: 1980

JOB CODE	JOB DESCRIPTION	NO OF PERS.	TIME SPENT USING EQUIPMENT CODE CODE	TIME	CODE	TIME	CODE	TIME
505	CUT-OFF WHEEL OPER	3	1506	60.0	1104	40.0	0	0.0
467	WHELLABRATOR OPER	3	1104	40.0	1485	30.0	1536	30.0
433	CORE ROOM WORKER	7	1543	40.0	1465	30.0	1435	30.0
422	NO-BAKE CORE OPER	5	1451	2.0	1543	49.0	1536	49.0
421	SHELL CORE OPERATOR	1	1536	30.0	1465	20.0	1543	50.0
368	MELTER/POURER	3	1438 1485	60.0 10.0	1435 1334	10.0 10.0	1104 0	10.0 0.0
340	SQUEZ/JOLT MOLDER OP	2	1338	15.0	1104	50.0	1159	35.
340	SQUEZ/JOLT MOLDER OP	3	1338	10.0	1435	90.0	0	0.0
310	ARC AIR GOUGER	2	1160	60.0	1104	40.0	0	0.0
303	ARC WELDER/A	3	1166	60.0	1104	30.0	1159	10.0
281	STAND STONE GRINDER	2	1517	60.0	1104	40.0	0	0.0
279	SWING GRINDER OPER	1	1512	60.0	1104	40.0	0	0.0
275	PN GRINDER OPER	10	1120	30.0	1119	30.0	1104	40.0
265	LABORER	1	1373 1465	50.0 5.0	1435 0	30.0 0.0	1104 0	15.0 0.0
265	LABORER	5	1435 1485	60.0 10.0	1438 1334	10.0 10.0	1104 0	10.0 0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
50500	CUT-OFF WHEEL OPER	3	1508	4.8	0.0
			1104	3.2	0.0
46700	WHELLABRATOR OPER	3	1104	3.2	0.0
			1485	2.4	0.0
			1536	2.4	0.0
43300	CORE ROOM WORKER	7	1543	3.2	0.0
			1485	2.4	0.0
			1435	2.4	0.0
42200	NO-BAKE CORE OPER	5	1451	0.2	0.0
			1543	3.9	0.0
			1536	3.9	0.0
42100	SHELL CORE OPERATOR	1	1536	2.4	0.0
			1485	1.6	0.0
			1543	4.0	0.0
36800	MELTER/POURER	3	1436	4.8	0.0
			1435	0.8	0.0
			1104	0.8	0.0
			1485	0.8	0.0
			1334	0.8	0.0
34001	SQUEZ/JOLT MOLDER OP	3	1338	0.6	0.0
			1435	7.2	0.0
34000	SQUEZ/JOLT MOLDER OP	2	1336	1.2	0.0
			1104	4.0	0.0
			1159	2.8	0.0
31000	ARC AIR GOUGER	2	1160	4.8	0.0
			1104	3.2	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BOM JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332             PLANT NO. =  7           NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF    EQUIP.    NOR. MEAN    NOR. STD.
CODE                                PERS.     CODE      TIME-8HRS    DEVIATION

30300   ARC WELDER/A                   3      1166        4.8          0.0
                                              1104        2.4          0.0
                                              1159        0.8          0.0

28100   STAND STONE GRINDER            2      1517        4.8          0.0
                                              1104        3.2          0.0

27900   SWING GRINDER OPER             1      1512        4.8          0.0
                                              1104        3.2          0.0

27500   PN GRINDER OPER               10      1120        2.4          0.0
                                              1119        2.4          0.0
                                              1104        3.2          0.0

26501   LABORER                        6      1435        4.8          0.0
                                              1438        0.8          0.0
                                              1104        0.8          0.0
                                              1485        0.8          0.0
                                              1334        0.8          0.0

26500   LABORER                        1      1373        4.0          0.0
                                              1435        2.4          0.0
                                              1104        1.2          0.0
                                              1485        0.4          0.0
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Seven Plant Average

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 AVERAGE FOR INDUSTRY NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1160	ARC AIR GOUGERS	7	106.4	3.82
1483	PN VIBRATOR	1	105.0	0.0
1490	SHAKEOUT CONVEYOR	1	105.0	0.0
1137	PN CHISEL	4	103.8	9.07
1503	RADIAL SAW	1	102.0	0.0
1341	MOLDMASTER	3	101.0	2.65
1492	SHAKEOUT TABLE	6	101.0	3.03
1494	SHAKEOUT TABLE	2	101.0	5.66
1437	ARC FURNACE	3	100.3	3.79
1508	CUT-OFF WHEEL	2	100.0	0.0
1338	SQUEZ/JOLT MOLDER	17	99.9	6.49
1118	PN DISC GRINDER	7	99.7	3.04
1507	CUT-OFF WHEEL	3	99.0	2.65
1482	PN VIBRATOR	3	98.7	3.06
1195	SPIRALBLAST	1	98.0	0.0
1387	SANDSLINGER	2	98.0	0.0
1453	FLEXIBLO CORE MKR	1	98.0	0.0
1491	SHAKEOUT CONVEYOR	1	98.0	0.0
1375	SAND HOPPER/VIB	5	97.6	2.51
1513	WHEEL GRINDER	2	97.0	7.07
1335	AUTO-MOLDER	2	95.5	2.12
1119	PN CONE GRINDER	14	95.4	2.21
1120	PN WHEEL GRINDER	15	95.3	2.79
1146	PN TAMPER	7	95.1	4.56
1189	ABRASIVE BLAST	1	95.0	0.0
1446	CRUCIBLE	1	95.0	0.0
1450	SHELL CORE	5	95.0	1.41
1451	NO-BAKE CORE	2	95.0	1.41
1509	TABOR CUT-OFF WHL	1	95.0	0.0
1542	COMPRESSED AIR	6	94.6	4.78
1477	HOIST	1	94.0	0.0
1502	BAND SAW	1	94.0	0.0
1336	SHELL MOLDER	3	93.7	2.52
1512	SWING GRINDER	3	93.7	0.58
1396	EXHAUST FAN	1	93.0	0.0
1459	CORE SET LINE	1	93.0	0.0
1117	PN DRILL GRINDER	8	92.6	2.56
1193	ABRASIVE BLAST	1	92.0	0.0
1194	ROTOBLAST	5	92.0	3.39
1337	HI-PRESS. MOLDER	1	92.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 AVERAGE FOR INDUSTRY NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1397	EXHAUST FAN	1	92.0	0.0
1486	SHAKEOUT	6	91.7	3.33
1517	STAND STONE GRIND	10	91.5	2.46
1339	MOLDER	1	91.0	0.0
1438	INDUCT. FURNACE	7	91.0	5.13
1374	MULLER	5	90.6	2.51
1499	WHEELABRATOR	5	90.2	5.63
1443	LADLE PRE-HEAT	5	90.0	3.61
1445	BACK/CRUCIBLE	1	90.0	0.0
1471	BACK/OVERHD CRANE	1	90.0	0.0
1440	FURNACE	2	89.5	4.95
1485	BACK/SHAKEOUT	10	89.3	3.37
1104	BACK/PN GRINDER	3	89.0	1.00
1506	BACK/CUTOFF WHEEL	6	88.2	3.06
1458	BACK/CORE SET LIN	1	88.0	0.0
1501	BACK/SAW/METAL	2	88.0	0.0
1511	BACK/ELEC GRINDER	3	88.0	0.0
1159	BACK/WLD/BRN/GOUG	4	87.8	3.20
1373	SANDMULLER	3	87.7	11.15
1386	BACK/SANDSLINGER	3	87.3	5.03
1395	BACK/EXHAUST FAN	1	87.0	0.0
1442	FURNACE	2	87.0	1.41
1175	WELD/ACETYLENE	1	86.0	0.0
1802	FORKLIFT	3	85.7	2.52
1498	BACK/WHEELABRATOR	2	85.5	0.71
1136	BACK/PN CHISEL	2	85.0	0.0
1188	BACK/ABRASV BLAST	1	85.0	0.0
1526	BACK/HAMMER	1	85.0	0.0
1334	BACK/MOLDERS	4	84.8	2.06
1372	BACK/MULLER	3	84.3	4.62
1543	BACK/COMPRSD AIR	6	83.8	7.91
1435	BACK/FURNACE	19	83.5	4.66
1536	BACK/VENTILATION	9	83.3	2.65
1102	BACK/FIN/GRINDERS	3	83.0	1.00
1145	BACK/PN TAMPER	2	83.0	7.07
1166	WELDING/ARC	3	83.0	3.46
1535	VENTILATION	2	82.5	0.71
1449	BACK/CORE EQUIP	3	82.3	4.51
1340	MOLDER-PACEMAKER	1	82.0	0.0
1452	CORE OVEN	1	82.0	0.0

ENVIRONMENTAL PROTECTION AGENCY BSN JOB NO. 9635

BACKGROUND AND EQUIPMENT NOISE DATA AVERAGES (LEQ)

SIC CODE = 332 AVERAGE FOR INDUSTRY NO DATES SPECIFIED

EQUIP. CODE	GENERIC NAME	NO. OF SAMPLES	MEAN LEQ(DBA)	STD. DEV.
1493	BACK. ONLY CONTR.	0	80.4	3.37
1551	BACK/EXHAUST FAN	3	79.7	7.02
1481	BACK/PN VIBRATOR	1	78.0	0.0
1552	BACK. ONLY CONTR.	0	77.9	7.02
1544	BACK. ONLY CONTR.	0	76.1	7.91

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

               EQUIPMENT NOISE DATA AVERAGES (LEQ) GENERALIZED

SIC CODE =  332         AVERAGE FOR INDUSTRY          NO DATES SPECIFIED

EQUIP.          GENERIC NAME            NO. OF          MEAN          STD.
 CODE                                   SAMPLES       LEQ(DBA)        DEV.

 1135       PNEUMATIC CHISEL               4            103.8         9.07
 1480       PNEUMATIC VIBRATOR             4            100.2         3.06
 1505       CUT-OFF WHEEL                  6             98.7         2.16
 1158       WELD/BURN/GOUGING             11             98.2         3.74
 1500       SAW/METAL                      2             98.0         0.0
 1385       SANDSLINGER                    2             98.0         0.0
 1333       MOLDER                        28             97.8         5.80
 1484       SHAKEOUT/DUMPOUT              16             97.6         3.49
 1525       HAMMERING                      2             96.0         5.66
 1392       HYDRAULIC PUMP                 1             96.0         0.0
 1103       PNEUMATIC GRINDER             44             95.6         2.62
 1144       PNEUMATIC TAMPER               8             95.4         4.56
 1444       CRUCIBLE                       1             95.0         0.0
 1448       CORE OVEN                      9             93.9         1.41
 1457       CORE SET LINE                  2             93.5         0.0
 1187       ABRASIVE BLASTING              8             93.1         3.39
 1510       ELECTRIC GRINDERS             15             92.7         2.96
 1371       MULLER                        13             92.6         5.47
 1394       EXHAUST FAN                    2             92.5         0.0
 1460       LATHE                          2             92.0         0.0
 1434       FURNACE                       19             91.6         4.40
 1497       WHEELABRATOR                   5             90.2         5.63
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 NO DATES SPECIFIED
PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
53400	PRESS OPERATOR	6	1102	8.0	0.0
50600	TABOR CUT-OFF SAW OP	2	1509	6.4	0.0
			1102	1.6	0.0
50503	CUT-OFF WHEEL OPER	2	1507	4.8	0.0
			1506	2.4	0.0
			1395	0.8	0.0
50502	CUT-OFF WHEEL OPER	2	1507	5.6	0.0
			1372	2.4	0.0
50501	CUT-OFF WHEEL OPER	2	1506	6.4	0.0
			1102	1.6	0.0
50500	CUT-OFF WHEEL OPER	3	1508	4.8	0.0
			1104	3.2	0.0
50400	RADIAL SAW OPERATOR	2	1503	4.8	0.0
			1501	3.2	0.0
50200	BAND SAW OPERATOR	2	1502	4.8	0.0
			1501	3.2	0.0
48003	OVERHEAD CRANE OPER	2	1471	2.4	0.0
			1102	3.2	0.0
			1188	2.4	0.0
48002	OVERHEAD CRANE OPER	2	1471	3.2	0.0
			1386	4.0	0.0
			1485	0.8	0.0
48001	OVERHEAD CRANE OPER	2	1471	4.0	0.0
			1435	4.0	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                              NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB        JOB DESCRIPTION        NO. OF     EQUIP.     NOR. MEAN    NOR. STD.
CODE                               PERS.      CODE      TIME-8HRS    DEVIATION

48000     OVERHEAD CRANE OPER          2       1471          8.0          0.0

46703     WHELLABRATOR OPER            1       1499          4.8          0.0
                                               1490          0.8          0.0
                                               1494          1.6          0.0
                                               1485          0.8          0.0

46702     WHELLABRATOR OPER            2       1499          4.8          0.0
                                               1506          3.2          0.0

46701     WHELLABRATOR OPER            4       1499          6.8          0.0
                                               1102          1.2          0.0

46700     WHELLABRATOR OPER            3       1104          3.2          0.0
                                               1485          2.4          0.0
                                               1536          2.4          0.0

46200     CUPOLA OPERATOR              1       1440          5.6          0.0
                                               1485          2.4          0.0

46101     INSPECTOR                    1       1490          1.6          0.0
                                               1525          1.6          0.0
                                               1526          4.8          0.0

46100     INSPECTOR                    2       1102          5.6          0.0
                                               1000          1.6          0.0
                                               1159          0.8          0.0

45900     SHIFTER                      3       1440          0.8          0.0
                                               1436          0.8          0.0
                                               1485          6.4          0.0

45000     DUMPOUT/SHAKEOUT OP          2       1490          5.6          0.0
                                               1494          1.6          0.0
                                               1485          0.8          0.0
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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                     PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                          NO DATES SPECIFIED
PLANT NOS. =    7,   6,   5,   4,   3,   2,   1,

 JOB       JOB DESCRIPTION          NO. OF    EQUIP.     NOR. MEAN     NOR. STD.
CODE                                PERS.      CODE      TIME-8HRS     DEVIATION

44301     SHAKEOUT TABLE OPER          2       1494         3.2           0.0
                                               1485         1.6           0.0
                                               1435         3.2           0.0

44300     SHAKEOUT TABLE OPER          4       1492         6.0           0.0
                                               1485         2.0           0.0

44002     SHAKEOUT OPERATOR            4       1486         4.8           0.0
                                               1485         3.2           0.0

44001     SHAKEOUT OPERATOR            2       1486         6.4           0.0
                                               1501         1.6           0.0

44000     SHAKEOUT OPERATOR            8       1486         4.0           0.0
                                               1372         1.6           0.0
                                               1395         2.4           0.0

43301     CORE ROOM WORKER            17       1452         2.4           0.0
                                               1449         5.6           0.0

43300     CORE ROOM WORKER             7       1543         3.2           0.0
                                               1465         2.4           0.0
                                               1435         2.4           0.0

42900     OIL-BAKE COREMAKER           2       1483         0.2           0.0
                                               1551         7.8           0.0

42700     CORE GLUER                   1       1450         1.6           0.0
                                               1334         6.4           0.0

42600     CORE SETTER                  3       1459         6.4           0.0
                                               1485         1.6           0.0

42203     NO-BAKE CORE OPER            5       1451         4.0           0.0
                                               1449         4.0           0.0
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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                                  NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB       JOB DESCRIPTION          NO. OF    EQUIP.     NOR. MEAN     NOR. STD.
CODE                                PERS.     CODE      TIME-8HRS     DEVIATION

42202   NO-BAKE CORE OPER             1       1543         8.0           0.0

42201   NO-BAKE CORE OPER             1       1551         8.0           0.0

42200   NO-BAKE CORE OPER             5       1451         0.2           0.0
                                              1543         3.9           0.0
                                              1536         3.9           0.0

42104   SHELL CORE OPERATOR           1       1450         5.6           0.0
                                              1334         2.4           0.0

42103   SHELL CORE OPERATOR           5       1450         4.0           0.0
                                              1449         4.0           0.0

42102   SHELL CORE OPERATOR           4       1450         4.0           0.0
                                              1159         4.0           0.0

42101   SHELL CORE OPERATOR           6       1450         5.6           0.0
                                              1372         2.4           0.0

42100   SHELL CORE OPERATOR           1       1536         2.4           0.0
                                              1485         1.6           0.0
                                              1543         4.0           0.0

40500   SPIRALBLAST OPERATOR          1       1195         3.2           0.0
                                              1435         2.4           0.0
                                              1485         2.4           0.0

40400   MACHINE BLASTER               4       1193         6.0           0.0
                                              1188         2.0           0.0

40300   HAND BLASTER                  2       1189         4.0           0.0
                                              1188         2.0           0.0
                                              1102         2.0           0.0
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ENVIRONMENTAL PROTECTION AGENCY BSN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332
PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
40204	ROTOBLAST OPERATOR	1	1194	2.4	0.0
			1501	5.6	0.0
40203	ROTOBLAST OPERATOR	2	1194	4.0	0.0
			1372	2.4	0.0
40202	ROTOBLAST OPERATOR	2	1194	6.8	0.0
			1102	1.2	0.0
40201	ROTOBLAST OPERATOR	2	1194	6.0	0.0
			1188	2.0	0.0
40200	ROTOBLAST OPERATOR	1	1194	1.2	0.0
			1499	1.2	0.0
			1104	5.6	0.0
39500	SANDSLINGER OPERATOR	2	1387	1.2	0.0
			1136	2.4	0.0
			1485	3.2	0.0
			1494	1.2	0.0
38800	SANDMULLER OPERATOR	1	1373	6.4	0.0
			1136	0.6	0.0
			1491	0.8	0.0
38504	MULLER OPER	1	1374	4.8	0.0
			1334	3.2	0.0
38503	MULLER OPER	1	1374	5.6	0.0
			1485	2.4	0.0
38502	MULLER OPER	1	1374	5.6	0.0
			1501	2.4	0.0
38501	MULLER OPER	1	1374	4.0	0.0
			1372	1.6	0.0
			1395	2.4	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                  BOM JOB NO.   9635

                          PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                                  NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB       JOB DESCRIPTION           NO. OF    EQUIP.     NOR. MEAN    NOR. STD.
CODE                                 PERS.      CODE      TIME-8HRS    DEVIATION

36500    MULLER OPER                    1       1372         0.6          0.0
                                                1145         1.9          0.0
                                                1435         4.5          0.0
                                                1543         0.8          0.0

36801    MELTER/POURER                  6       1436         4.0          0.0
                                                1372         1.6          0.0
                                                1395         2.4          0.0

36800    MELTER/POURER                  3       1438         4.8          0.0
                                                1435         0.8          0.0
                                                1104         0.8          0.0
                                                1485         0.6          0.0
                                                1334         0.8          0.0

36704    POURER                         6       1440         2.4          0.0
                                                1438         2.4          0.0
                                                1485         3.2          0.0

36703    POURER                         2       1446         1.6          0.0
                                                1501         5.6          0.0
                                                1435         0.8          0.0

36702    POURER                         2       1446         1.6          0.0
                                                1485         5.6          0.0
                                                1435         0.8          0.0

36701    POURER                         4       1437         3.2          0.0
                                                1435         3.2          0.0
                                                1485         1.6          0.0

36700    POURER                         8       1435         3.2          0.0
                                                1485         2.4          0.0
                                                1536         1.2          0.0
                                                1334         0.8          0.0
                                                1451         0.4          0.0
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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                          NO DATES SPECIFIED
PLANT NOS. =   7,  6,  5,  4,  3,  2,  1,

 JOB        JOB DESCRIPTION           NO. OF    EQUIP.     NOR. MEAN    NOR. STD.
CODE                                  PERS.     CODE      TIME-8HRS    DEVIATION

35000    MOLD WASH WORKER                1      1337          1.6          0.0
                                                1491          1.6          0.0
                                                1136          4.8          0.0

34300    MOLDMASTER OPERATOR             6      1341          2.8          0.0
                                                1375          2.6          0.0
                                                1536          2.4          0.0

34200    PACEMAKER MOLDR OPER            1      1340          3.2          0.0
                                                1435          1.6          0.0
                                                1485          3.2          0.0

34105    FLOOR MOLDER                    2      1146          1.6          0.0
                                                1501          5.6          0.0
                                                1462          0.8          0.0

34104    FLOOR MOLDER                    4      1146          2.4          0.0
                                                1435          5.6          0.0

34103    FLOOR MOLDER                    4      1146          2.4          0.0
                                                1366          3.2          0.0
                                                1485          2.4          0.0

34102    FLOOR MOLDER                    4      1386          6.4          0.0
                                                1485          1.2          0.0
                                                1471          0.4          0.0

34101    FLOOR MOLDER                    2      1435          8.0          0.0

34100    FLOOR MOLDER                    4      1145          2.4          0.0
                                                1435          5.6          0.0

34004    SQUEZ/JOLT MOLDER OP           18      1338          5.6          0.0
                                                1334          2.4          0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332
PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,
NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	WOR. MEAN TIME-8HRS	WOR. STD. DEVIATION
34003	SQUEZ/JOLT MOLDER OP	7	1336	5.6	0.0
			1372	2.4	0.0
34002	SQUEZ/JOLT MOLDER OP	5	1146	0.5	0.0
			1338	0.3	0.0
			1482	0.3	0.0
			1145	2.1	0.0
			1435	4.8	0.0
34001	SQUEZ/JOLT MOLDER OP	3	1336	0.8	0.0
			1435	7.2	0.0
34000	SQUEZ/JOLT MOLDER OP	2	1338	1.2	0.0
			1104	4.0	0.0
			1159	2.8	0.0
33901	AUTO-MOLDER OPERATOR	2	1335	6.4	0.0
			1334	1.6	0.0
33900	AUTO-MOLDER OPERATOR	2	1335	6.4	0.0
			1372	1.6	0.0
33800	SHELLMOLDER OPERATOR	4	1336	4.0	0.0
			1506	4.0	0.0
33700	HI PRESS. MOLDER OP	2	1337	4.8	0.0
			1506	1.6	0.0
			1146	0.4	0.0
			1392	0.4	0.0
			1491	0.8	0.0
33101	LADLE SKIMMER	2	1435	2.4	0.0
			1388	2.4	0.0
			1536	2.4	0.0
			1334	0.4	0.0
			1481	0.4	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                SUN JOB NO.   9635

                    PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                               NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB       JOB DESCRIPTION           NO. OF    EQUIP.    NOR. MEAN    NOR. STD.
CODE                                 PERS.      CODE     TIME-8HRS    DEVIATION

33100   LADLE SKIMMER                  2        1485        4.0          0.0
                                                1536        1.6          0.0
                                                1435        1.6          0.0
                                                1334        0.4          0.0
                                                1481        0.4          0.0

33002   LADLE PRE-HEATER               2        1435        8.0          0.0

33001   LADLE PRE-HEATER               2        1435        6.4          0.0
                                                1137        1.6          0.0

33000   LADLE PRE-HEATER               2        1435        7.2          0.0
                                                1485        0.8          0.0

32900   CUPOLA FURNACE OPER            2        1440        5.6          0.0
                                                1435        2.4          0.0

32800   FURNACE CHARGER                1        1440        2.4          0.0
                                                1438        2.4          0.0
                                                1485        3.2          0.0

32701   INDUCT. FURNACE OPER           1        1438        5.6          0.0
                                                1485        2.4          0.0

32700   INDUCT. FURNACE OPER           2        1438        4.8          0.0
                                                1159        3.2          0.0

32600   ARC FURNACE OPERATOR           5        1437        5.8          0.36
                                                1435        2.2          0.36

32500   FURNACE OPERATOR               4        1446        4.8          0.0
                                                1445        1.6          0.0
                                                1485        1.6          0.0

31900   POWDER BURNER                  2        1160        5.2          0.0
                                                1102        2.8          0.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                       PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                                NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB         JOB DESCRIPTION          NO. OF    EQUIP.     HOR. MEAN    HOR. STD.
CODE                                  PERS.      CODE      TIME-8HRS    DEVIATION

31600    GAS BURNER                      2       1160         5.2          0.0
                                                 1102         2.8          0.0

31004    ARC AIR GOUGER                  2       1160         6.4          0.0
                                                 1517         1.6          0.0

31003    ARC AIR GOUGER                  4       1160         5.6          0.0
                                                 1102         2.4          0.0

31002    ARC AIR GOUGER                  2       1160         5.6          0.0
                                                 1159         2.4          0.0

31001    ARC AIR GOUGER                  2       1160         4.0          0.0
                                                 1159         2.4          0.0
                                                 1102         1.6          0.0

31000    ARC AIR GOUGER                  2       1160         4.8          0.0
                                                 1104         3.2          0.0

30700    ACETYLENE WELDER                1       1175         1.2          0.0
                                                 1104         4.0          0.0
                                                 1000         2.8          0.0

30304    ARC WELDER/A                   10       1166         4.8          0.0
                                                 1102         2.0          0.0
                                                 1160         1.2          0.0

30303    ARC WELDER/A                    2       1166         5.6          0.0
                                                 1159         2.4          0.0

30302    ARC WELDER/A                    4       1166         6.4          0.0
                                                 1159         1.2          0.0
                                                 1102         0.4          0.0

30301    ARC WELDER/A                   10       1166         5.6          0.0
                                                 1159         1.6          0.0
                                                 1160         0.8          0.0
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332<

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332
PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
30300	ARC WELDER/A	3	1166	4.8	0.0
			1104	2.4	0.0
			1159	0.8	0.0
30200	ARC-AIR OPERATOR	6	1160	4.0	0.0
			1159	3.2	0.0
			1395	0.8	0.0
28200	TRIM GRINDER OPER	4	1503	4.8	0.0
			1501	3.2	0.0
28104	STAND STONE GRINDER	4	1517	4.8	0.0
			1501	3.2	0.0
28103	STAND STONE GRINDER	2	1517	4.8	0.0
			1511	2.4	0.0
			1395	0.8	0.0
28102	STAND STONE GRINDER	5	1517	3.2	0.0
			1372	1.6	0.0
			1117	3.2	0.0
28101	STAND STONE GRINDER	10	1517	6.4	0.0
			1102	1.6	0.0
28100	STAND STONE GRINDER	2	1517	4.8	0.0
			1104	3.2	0.0
28001	WHEEL GRINDER OPER	6	1513	6.4	0.0
			1511	1.6	0.0
28000	WHEEL GRINDER OPER	5	1513	3.2	0.0
			1372	1.6	0.0
			1117	3.2	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                    PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                             NO DATES SPECIFIED
PLANT NOS. =   7,  6,  5,  4,  3,  2,  1,

 JOB        JOB DESCRIPTION         NO. OF    EQUIP.     NOR. MEAN    NOR. STD.
CODE                                PERS.      CODE      TIME-8HRS    DEVIATION

27902    SWING GRINDER OPER            3       1512          5.6          0.0
                                               1511          2.4          0.0

27901    SWING GRINDER OPER            4       1512          6.4          0.0
                                               1102          1.6          0.0

27900    SWING GRINDER OPER            1       1512          4.8          0.0
                                               1104          3.2          0.0

27800    PN CONE GRINDER OPER          3       1119          4.0          0.0
                                               1506          3.2          0.0
                                               1395          0.8          0.0

27700    PN DISC GRINDER OPER          4       1118          4.0          0.0
                                               1506          3.2          0.0
                                               1395          0.8          0.0

27600    PN DRILL GRINDER OP           1       1117          6.4          0.0
                                               1526          1.6          0.0

27503    PN GRINDER OPER               6       1120          4.0          0.0
                                               1506          3.2          0.0
                                               1395          0.8          0.0

27502    PN GRINDER OPER              62       1120          1.5          0.19
                                               1119          1.1          0.35
                                               1118          1.0          0.25
                                               1117          1.0          0.25
                                               1102          3.5          0.75

27501    PN GRINDER OPER               1       1517          4.0          0.0
                                               1104          4.0          0.0

27500    PN GRINDER OPER              13       1120          2.5          0.18
                                               1119          2.1          0.53
                                               1104          3.4          0.35
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APPENDIX E

Sawmill Industry - Individual Plant Results

The results presented here for each plant are in the form of eight tables, which correspond to tables 5-1 to 5-9 (excluding 5-7) in section 5, corresponding to the industry average results. There is one group of eight tables for each of the nine plants.

Plant No. 1

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
17300	GRADER/PLANER MILL	16	92.1	92.1	117	117
16700	PLANER OPERATOR	8	93.3	93.3	67	67
13400	EDGER OPERATOR	4	97.1	97.7	48	51
21300	MILLWRIGHT/PLANER	3	99.4	103.5	44	48
13700	CHIPPER OPERATOR	2	100.9	105.1	33	45
16800	PLANER SET-UP MAN	2	100.7	101.7	33	35
12700	TAIL SAWYER	4	93.1	93.1	32	32
14801	TRIMMER OPERATOR	4	92.2	92.2	29	29
17600	DRY CHAIN PULLER	20	82.5	85.5	28	55
10400	PLANER SUPERVISOR	4	91.0	91.0	25	25
20100	LUMBER CARRIER OPER	8	86.0	86.0	24	33
22800	ELECTRICIANS	5	85.8	85.8	23	23
26100	CLEAN-UP MAN/REGULAR	2	96.6	103.5	23	32
21100	MILLWRIGHT/GENERAL	4	89.3	95.4	20	45
24800	POWERHOUSE OPERATOR	12	83.1	83.1	19	19
23300	CARPENTERS	4	88.2	88.2	17	17
14000	RESAW OPERATOR	2	91.8	91.8	14	14
11700	DECK SCALER	2	91.8	92.7	14	15
26200	CLEAN-UP MAN/DOWN TM	3	88.0	88.0	12	12
14800	TRIMMER OPERATOR	4	86.2	88.4	12	17
15400	STACKER-GREEN	4	86.0	85.0	12	12
19100	SPECIALTY RESAW OFFB	2	90.0	91.4	11	13
12300	SAWYER	4	85.5	85.5	11	11
10100	SAWMILL SUPERVISOR	3	87.2	87.2	11	11
19700	MOULDER OFFBEARER	2	89.0	89.0	9	9
23800	PIPE-FITTERS	2	88.2	88.2	8	8
16100	UNSTACKER-DRY	2	88.0	88.0	8	8
19000	SPECIALTY RESAW OPER	2	88.0	90.8	8	12
14500	GREEN CHAIN OPERATOR	4	84.0	85.4	8	10
19600	MOULDER FEEDER	2	87.1	87.1	7	7
20200	FORKLIFT OPERATOR	11	80.0	80.0	6	6
15500	STICKERMAN-GREEN	2	86.0	86.0	6	6
15100	GREEN CHAIN PULLER	2	84.0	85.4	4	5
18100	CHECKERS	6	80.0	80.0	3	3
11100	LOG CARRIER OPER	1	87.0	87.0	3	3
15600	UNIPAC OPERATOR	2	82.0	82.0	2	2
17900	BANDER OPERATOR	3	80.0	80.0	1	1
20700	RAILCAR LOADER	9	76.5	77.2	0	1
16200	UNSTACKER PULLER	2	<75.0	<75.0	0	0
11400	DEBARKER OPERATOR	2	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   963

                         PERSONNEL NOISE EXPOSURE AND IMPACT

                                     EPA CRITERIA

SIC CODE =  242                 PLANT NO. =  1            NO DATES SPECIFIE

 JOB        JOB DESCRIPTION              NO. OF    SOUND     LEVEL      LEV. WT. POP.
CODE                                     PERS.      MEAN      W.C.       MEAN     W.C.

10700       POND SORTER                    4      <75.0     <75.0         0        0
10800       LOG SORTER                     2      <75.0     <75.0         0        0
16000       KILN OPERATOR                  3      <75.0     <75.0         0        0
21900       MACHINISTS                     3      <75.0     <75.0         0        0
22300       MECHANICS                      3      <75.0     <75.0         0        0
24400       FILERS                         6      <75.0     <75.0         0        0
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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                  PERSONNEL NOISE EXPOSURE AND IMPACT

                   THRESHOLD LEVEL         = 90.0 DBA
                   8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                   EXCHANGE RATE           = 5 DBA

SIC CODE =  242            PLANT NO. =  1            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION         NO. OF    SOUND LEVEL    DAILY NOISE DOSE
 CODE                              PERS.     MEAN   W.C.     MEAN     W.C.

13700     CHIPPER OPERATOR            2      99.5  103.7     3.75      6.67
16800     PLANER SET-UP MAN           2      97.7   98.5     2.92      3.23
13400     EDGER OPERATOR              4      96.4   97.0     2.44      2.63
16700     PLANER OPERATOR             8      93.3   93.3     1.58      1.58
21300     MILLWRIGHT/PLANER           3      92.7   93.9     1.46      1.71
26100     CLEAN-UP MAN/REGULAR        2      92.6   96.4     1.44      2.41
17300     GRADER/PLANER MILL         16      92.0   92.0     1.33      1.33
14801     TRIMMER OPERATOR            4      90.0   90.0     1.00      1.00
14000     RESAW OPERATOR              2     <90.0  <90.0     0.99      0.99
10400     PLANER SUPERVISOR           4     <90.0  <90.0     0.87      0.87
  2700    TAIL SAWYER                 4     <90.0  <90.0     0.61      0.61
23800     PIPE-FITTERS                2     <90.0  <90.0     0.31      0.31
23300     CARPENTERS                  4     <90.0  <90.0     0.31      0.31
22800     ELECTRICIANS                5     <90.0  <90.0     0.24      0.24
11700     DECK SCALER                 2     <90.0  <90.0     0.21      0.29
10100     SAWMILL SUPERVISOR          3     <90.0  <90.0     0.20      0.20
10700     POND SORTER                 4     <90.0  <90.0     0.00      0.0
10800     LOG SORTER                  2     <90.0  <90.0     0.00      0.0
11100     LOG CARRIER OPER            1     <90.0  <90.0     0.00      0.0
11400     DEBARKER OPERATOR           2     <90.0  <90.0     0.00      0.0
12300     SAWYER                      4     <90.0  <90.0     0.00      0.0
14500     GREEN CHAIN OPERATOR        4     <90.0  <90.0     0.00      0.0
14800     TRIMMER OPERATOR            4     <90.0  <90.0     0.00      0.56
15100     GREEN CHAIN PULLER          2     <90.0  <90.0     0.00      0.0
15400     STACKER-GREEN               4     <90.0  <90.0     0.00      0.0
15500     STICKERMAN-GREEN            2     <90.0  <90.0     0.00      0.0
15600     UNIPAC OPERATOR             2     <90.0  <90.0     0.00      0.0
16000     KILN OPERATOR               3     <90.0  <90.0     0.00      0.0
16100     UNSTACKER-DRY               2     <90.0  <90.0     0.00      0.0
16200     UNSTACKER PULLER            2     <90.0  <90.0     0.00      0.0
17600     DRY CHAIN PULLER           20     <90.0  <90.0     0.00      0.0
17900     BANDER OPERATOR             3     <90.0  <90.0     0.00      0.0
18100     CHECKERS                    6     <90.0  <90.0     0.00      0.0
19000     SPECIALTY RESAW OPER        2     <90.0   90.8     0.00      1.12
19100     SPECIALTY RESAW OFFB        2     <90.0   91.4     0.00      1.22
19600     MOULDER FEEDER              2     <90.0  <90.0     0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                                 BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT

                     THRESHOLD LEVEL        = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE          = 5 DBA

SIC CODE =  242              PLANT NO. =  1             NO DATES SPECIFIED

  JOB        JOB DESCRIPTION          NO. OF     SOUND LEVEL      DAILY NOISE DOSE
 CODE                                 PERS.     MEAN    W.C.      MEAN      W.C.

19700      MOULDER OFFBEARER            2     <90.0   <90.0      0.00       0.0
20100      LUMBER CARRIER OPER          8     <90.0   <90.0      0.00       0.0
20200      FORKLIFT OPERATOR           11     <90.0   <90.0      0.00       0.0
20700      RAILCAR LOADER               9     <90.0   <90.0      0.00       0.0
21100      MILLWRIGHT/GENERAL           4     <90.0    95.9      0.00       2.27
21900      MACHINISTS                   3     <90.0   <90.0      0.00       0.0
22300      MECHANICS                    3     <90.0   <90.0      0.00       0.0
24400      FILERS                       6     <90.0   <90.0      0.00       0.0
24800      POWERHOUSE OPERATOR         12     <90.0   <90.0      0.00       0.0
26200      CLEAN-UP MAN/DOWN TM         3     <90.0   <90.0      0.00       0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
173	GRADER/PLANER MILL	16	92.1	92.1	117	117
167	PLANER OPERATOR	8	93.3	93.3	67	67
134	EDGER OPERATOR	4	97.1	97.7	48	51
213	MILLWRIGHT/PLANER	3	99.4	100.5	44	48
148	TRIMMER OPERATOR	8	89.2	90.3	42	47
137	CHIPPER OPERATOR	2	100.9	105.1	33	45
168	PLANER SET-UP MAN	2	100.7	101.7	33	35
127	TAIL SAWYER	4	93.1	93.1	32	32
176	DRY CHAIN PULLER	20	82.5	85.5	26	55
104	PLANER SUPERVISOR	4	91.0	91.0	25	25
201	LUMBER CARRIER OPER	8	86.0	88.0	24	33
228	ELECTRICIANS	5	88.8	88.8	23	23
261	CLEAN-UP MAN/REGULAR	2	96.6	100.5	23	32
211	MILLWRIGHT/GENERAL	4	89.3	96.4	20	45
248	POWERHOUSE OPERATOR	12	83.1	83.1	19	19
233	CARPENTERS	4	88.2	88.2	17	17
140	RESAW OPERATOR	2	91.8	91.8	14	14
117	DECK SCALER	2	91.8	92.7	14	15
262	CLEAN-UP MAN/DOWN TM	3	88.0	88.0	12	12
154	STACKER-GREEN	4	86.0	86.0	12	12
191	SPECIALTY RESAW OFFB	2	90.0	91.4	11	13
123	SAWYER	4	85.5	85.5	11	11
101	SAWMILL SUPERVISOR	3	87.2	87.2	11	11
197	MOULDER OFFBEARER	2	89.0	89.0	9	9
238	PIPE-FITTERS	2	88.2	88.2	8	8
161	UNSTACKER-DRY	2	88.0	88.0	8	8
190	SPECIALTY RESAW OPER	2	88.0	90.8	8	12
145	GREEN CHAIN OPERATOR	4	84.0	85.4	8	10
196	MOULDER FEEDER	2	87.1	87.1	7	7
202	FORKLIFT OPERATOR	11	80.0	80.0	6	6
155	STICKERMAN-GREEN	2	86.0	86.0	6	6
151	GREEN CHAIN PULLER	2	84.0	85.4	4	5
181	CHECKERS	6	80.0	80.0	3	3
111	LOG CARRIER OPER	1	87.0	87.0	3	3
156	UNIPAC OPERATOR	2	82.0	82.0	2	2
179	BANDER OPERATOR	3	80.0	80.0	1	1
207	RAILCAR LOADER	9	76.5	77.2	0	1
162	UNSTACKER PULLER	2	<75.0	<75.0	0	0
114	DEBARKER OPERATOR	2	<75.0	<75.0	0	0
107	POND SORTER	4	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY
                                                                BBN JOB NO.   963
                        PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                          EPA CRITERIA

SIC CODE =  242                          PLANT NO. =  1              NO DATES SPECIFIE

 JOB        JOB DESCRIPTION                NO. OF     SOUND     LEVEL        LEV. WT. POP.
CODE                                       PERS.       MEAN      W.C.         MEAN     W.C.

 108       LOG SORTER                        2        <75.0     <75.0           0        0
 160       KILN OPERATOR                     3        <75.0     <75.0           0        0
 219       MACHINISTS                        3        <75.0     <75.0           0        0
 223       MECHANICS                         3        <75.0     <75.0           0        0
 244       FILERS                            6        <75.0     <75.0           0        0



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TOTAL NUMBER OF PERSONNEL                                              201
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                         176
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                         176
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                          53
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                          61
LEVEL WEIGHTED POPULATION (MEAN)                                       768.6
LEVEL WEIGHTED POPULATION (W.C.)                                       878.7

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                   THRESHOLD LEVEL           = 90.0 DBA
                   8-HR PERMISSIBLE LEVEL = 90.0 DBA
                   EXCHANGE RATE             = 5 DBA

SIC CODE =  242              PLANT NO. =  1            NO DATES SPECIFIED

 JOB        JOB DESCRIPTION          NO. OF     SOUND LEVEL     DAILY NOISE DOSE
CODE                                 PERS.      MEAN    W.C.     MEAN     W.C.

 137        CHIPPER OPERATOR            2       99.5   103.7     3.75     6.67
 168        PLANER SET-UP MAN           2       97.7    98.5     2.92     3.23
 134        EDGER OPERATOR              4       96.4    97.0     2.44     2.63
 167        PLANER OPERATOR             8       93.3    93.3     1.58     1.58
 213        MILLWRIGHT/PLANER           3       92.7    93.9     1.46     1.71
 261        CLEAN-UP MAN/REGULAR        2       92.6    96.4     1.44     2.41
 173        GRADER/PLANER MILL         16       92.0    92.0     1.33     1.33
 140        RESAW OPERATOR              2      <90.0   <90.0     0.99     0.99
 104        PLANER SUPERVISOR           4      <90.0   <90.0     0.87     0.87
 127        TAIL SAWYER                 4      <90.0   <90.0     0.61     0.61
 148        TRIMMER OPERATOR            8      <90.0   <90.0     0.50     0.78
 238        PIPE-FITTERS                2      <90.0   <90.0     0.31     0.31
 233        CARPENTERS                  4      <90.0   <90.0     0.31     0.31
 228        ELECTRICIANS                5      <90.0   <90.0     0.24     0.24
 117        DECK SCALER                 2      <90.0   <90.0     0.21     0.29
 101        SAWMILL SUPERVISOR          3      <90.0   <90.0     0.20     0.20
 107        POND SORTER                 4      <90.0   <90.0     0.00     0.0
 108        LOG SORTER                  2      <90.0   <90.0     0.00     0.0
 111        LOG CARRIER OPER            1      <90.0   <90.0     0.00     0.0
 114        DEBARKER OPERATOR           2      <90.0   <90.0     0.00     0.0
 123        SAWYER                      4      <90.0   <90.0     0.00     0.0
 145        GREEN CHAIN OPERATOR        4      <90.0   <90.0     0.00     0.0
 151        GREEN CHAIN PULLER          2      <90.0   <90.0     0.00     0.0
 154        STACKER-GREEN               4      <90.0   <90.0     0.00     0.0
 155        STICKERMAN-GREEN            2      <90.0   <90.0     0.00     0.0
 156        UNIPAC OPERATOR             2      <90.0   <90.0     0.00     0.0
 160        KILN OPERATOR               3      <90.0   <90.0     0.00     0.0
 161        UNSTACKER-DRY               2      <90.0   <90.0     0.00     0.0
 162        UNSTACKER PULLER            2      <90.0   <90.0     0.00     0.0
 176        DRY CHAIN PULLER           20      <90.0   <90.0     0.00     0.0
 179        BANDER OPERATOR             3      <90.0   <90.0     0.00     0.0
 181        CHECKERS                    6      <90.0   <90.0     0.00     0.0
 190        SPECIALTY RESAW OPER        2      <90.0    90.8     0.00     1.12
 191        SPECIALTY RESAW OFFB        2      <90.0    91.4     0.00     1.22
 196        MOULDER FEEDER              2      <90.0   <90.0     0.00     0.0
 197        MOULDER OFFBEARER           2      <90.0   <90.0     0.00     0.0
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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                 THRESHOLD LEVEL         = 90.0 DBA
                 8-HR PERMISSIBLE LEVEL = 90.0 DBA
                 EXCHANGE RATE           = 5 DBA

SIC CODE =  242           PLANT NO. =  1           NO DATES SPECIFIED

 JOB      JOB DESCRIPTION       NO. OF     SOUND LEVEL      DAILY NOISE DOSE
CODE                            PERS.      MEAN     W.C.     MEAN      W.C.

 201      LUMBER CARRIER OPER       8     <90.0   <90.0      0.00      0.0
 202      FORKLIFT OPERATOR        11     <90.0   <90.0      0.00      0.0
 207      RAILCAR LOADER            9     <90.0   <90.0      0.00      0.0
 211      MILLWRIGHT/GENERAL        4     <90.0    95.9      0.00      2.27
 219      MACHINISTS                3     <90.0   <90.0      0.00      0.0
 223      MECHANICS                 3     <90.0   <90.0      0.00      0.0
 244      FILERS                    6     <90.0   <90.0      0.00      0.0
 248      POWERHOUSE OPERATOR      12     <90.0   <90.0      0.00      0.0
 262      CLEAN-UP MAN/DOWN TM      3     <90.0   <90.0      0.00      0.0




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            TOTAL NUMBER OF PERSONNEL        =      201
            TOTAL NUMBER OVEREXPOSED (MEAN) =       37
            TOTAL NUMBER OVEREXPOSED (W.C.) =       45

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM P.I.
1741	DRY CHAIN CONVEYR	4	82.5	85.5	29	20.6	0.117
1702	PLANER	3	109.3	110.5	44	19.2	0.109
1716	PLANER/ENCL	2	91.0	95.2	57	10.5	0.060
1623	HEADRIG	1	86.0	86.0	43	10.3	0.058
1674	TRIMMER	1	95.0	95.0	13	8.0	0.046
1794	POWERHOUSE	1	84.0	84.0	12	7.4	0.042
1711	PLANER/ENCL	2	93.0	95.8	49	7.2	0.041
1682	GREEN CHAIN CONVY	2	84.0	85.4	6	6.0	0.034
1636	EDGER	2	99.5	100.2	18	5.5	0.031
1796	POWERHOUSE	1	82.0	82.0	12	4.6	0.026
1690	KILN CHAIN CONVYR	1	86.0	86.0	4	4.0	0.023
1784	CHIPPER	2	103.0	107.2	4	3.7	0.021
1672	TRIMMER	3	88.3	90.8	4	3.2	0.018
1694	KILN CHAIN CONVYR	1	82.0	82.0	11	3.2	0.018
1626	HEADRIG	1	98.0	98.0	4	2.4	0.014
1752	STACK BANDER	1	82.0	82.0	3	2.4	0.014
1788	BACK. ONLY CONTR.	0	84.0	91.1	25	2.1	0.012
1691	KILN CHAIN CONVYR	1	86.0	86.0	2	2.0	0.011
1692	KILN CHAIN CONVYR	1	88.0	88.0	2	2.0	0.011
1762	RESAW-SPEC/ENCL	2	88.0	90.8	2	2.0	0.011
1731	MOULDER/ENCL	1	89.0	89.0	2	2.0	0.011
1766	RESAW-SPEC/ENCL	2	90.0	91.4	2	2.0	0.011
1727	MOULDER/ENCL	1	88.0	88.0	2	2.0	0.011
1647	RESAW-LARGE	1	93.0	93.0	2	1.7	0.010
1627	HEADRIG	1	90.0	90.0	4	1.6	0.009
1670	TRIMMER	2	82.0	83.4	8	0.9	0.005
1612	CUT-OFF SAW	1	87.0	87.0	25	0.8	0.005
1613	CUT-OFF SAW	2	100.5	102.5	2	0.7	0.004
1751	STACK BANDER	1	76.0	76.0	3	0.6	0.003
1635	EDGER	2	91.0	92.4	4	0.5	0.003

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ENVIRONMENTAL PROTECTION AGENCY                                      BBN JOB NO.   963

                                   EQUIPMENT NOISE IMPACT

                                       EPA CRITERIA

SIC CODE =  242                    PLANT NO. =  1                  NO DATES SPECIFIE

EQUIP.        EQUIPMENT            NO.OF    MEAN     W.C.       NO.OF    PRIORITY  N
 CODE        DESCRIPTION           UNITS     LJ       LJ        PERS.     INDEX    P

 1622     HEADRIG                    1      83.0     83.0         4         0.4   0.
 1646     RESAW-LARGE                1      88.0     88.0         2         0.3   0.
 1783     CHIPPER                    2      91.0     92.4         4         0.1   0.
 1726     MOULDER/ENCL               1      78.0     78.0         2         0.0   0.
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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL         = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE           = 5 DBA

SIC CODE =  242                PLANT NO. =  1             NO DATES SPECIFIED

EQUIP.       EQUIPMENT              NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION             UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1702     PLANER                      3     109.3    110.5      29       11.3    0.307
 1716     PLANER/ENCL                 2      91.0     95.2      42       10.9    0.296
 1711     PLANER/ENCL                 2      93.0     95.8      34        6.7    0.181
 1784     CHIPPER                     2     103.0    107.2       4        3.6    0.098
 1636     EDGER                       2      99.5    100.2       4        3.1    0.083
 1635     EDGER                       2      91.0     92.4       4        0.9    0.025
 1783     CHIPPER                     2      91.0     92.4       4        0.4    0.010
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1699	PLANER	7	99.4	102.1	150	36.9	0.210
1739	DRY CHAIN	4	82.5	85.5	29	20.6	0.117
1620	HEADRIG	4	89.3	89.3	55	14.7	0.084
1664	TRIMMER	7	85.0	87.2	25	12.2	0.069
1792	POWERHOUSE	2	83.0	83.0	24	12.0	0.068
1688	KILN CHAIN	5	82.8	82.8	19	11.2	0.064
1800	FORKLIFT	1	80.0	80.0	11	11.0	0.063
1747	RAIL CAR LOAD	2	76.5	77.2	9	9.0	0.051
1810	LUMBER CARRIER	3	86.0	88.0	8	8.0	0.045
1776	CONVEYOR/GEN	1	88.0	88.0	19	6.9	0.039
1629	EDGER	4	95.3	96.4	22	6.0	0.034
1679	GREEN CHAIN	2	84.0	85.4	6	6.0	0.034
1724	MOULDER	4	90.0	90.0	6	6.0	0.034
1759	RESAW/SPECIALTY	5	89.0	91.2	6	4.0	0.023
1779	CHIPPER	4	97.0	101.5	4	4.0	0.023
1749	STACK BANDER	2	79.0	79.0	8	3.8	0.022
1785	HOG	1	92.0	99.1	6	3.0	0.017
1644	RESAW/LARGE	2	90.5	90.5	25	2.1	0.012
1610	CUT-OFF	3	96.0	98.1	4	2.0	0.011
1808	LOG CARRIER	1	90.0	90.0	27	1.6	0.009
1798	SAWMILL OFFICE	1	70.0	70.0	1	1.0	0.006

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                   THRESHOLD LEVEL            = 90.0 DBA
                   8-HR PERMISSIBLE LEVEL = 90.0 DBA
                   EXCHANGE RATE              = 5 DBA

SIC CODE =  242                 PLANT NO. =  1            NO DATES SPECIFIED

EQUIP.        EQUIPMENT            NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION           UNITS     LJ       LJ    PERS.    INDEX      P.I.

 1699    PLANER                       7      99.4   102.1    105      29.0    0.784
 1779    CHIPPER                      4      97.0   101.5      8       4.0    0.108
 1629    EDGER                        4      95.3    96.4      8       4.0    0.108
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Plant No. 2

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
17300	GRADER/PLANER MILL	8	92.0	92.0	57	57
13400	EDGER OPERATOR	6	93.0	93.7	48	52
21100	MILLWRIGHT/GENERAL	5	92.7	92.7	39	39
16700	PLANER OPERATOR	4	93.8	94.2	35	36
17600	DRY CHAIN PULLER	14	84.8	85.7	33	47
21900	MACHINISTS	5	90.8	90.8	31	31
13700	CHIPPER OPERATOR	2	99.4	101.2	29	34
12300	SAWYER	4	91.6	91.6	27	27
20200	FORKLIFT OPERATOR	5	89.4	89.4	25	25
22800	ELECTRICIANS	3	93.0	93.0	24	24
12800	QUADSAW TAIL SAWYER	2	97.0	97.0	24	24
14800	TRIMMER OPERATOR	2	95.0	95.0	19	19
14300	UNSCRAMBLE OPERATOR	2	93.0	93.0	16	16
10100	SAWMILL SUPERVISOR	2	92.7	92.7	15	15
24500	OILER	2	92.7	92.7	15	15
13300	SLAB BOARD PULLER	2	92.5	93.2	15	16
16100	UNSTACKER-DRY	2	88.6	88.6	9	9
18500	RIPSAW OPERATOR	1	94.0	94.0	9	9
26100	CLEAN-UP MAN/REGULAR	1	93.0	93.0	8	8
23300	CARPENTERS	1	93.0	93.0	8	8
18600	RIPSAW OFFBEARER	1	92.0	92.0	7	7
15401	STACKER-GREEN	2	87.0	95.5	7	21
15400	STACKER-GREEN	2	86.0	93.8	6	17
15500	STICKERMAN-GREEN	2	85.2	85.2	5	5
23800	PIPE-FITTERS	1	89.3	89.3	5	5
26500	LABORER	1	89.1	89.1	5	5
17900	BANDER OPERATOR	2	85.0	85.0	4	4
20100	LUMBER CARRIER OPER	3	83.0	84.4	4	6
24800	POWERHOUSE OPERATOR	3	83.0	84.4	4	6
19600	MOULDER FEEDER	1	88.7	88.7	4	4
14500	GREEN CHAIN OPERATOR	2	84.0	85.4	4	5
15900	TRANSFER OPERATOR	2	82.4	82.4	2	2
24400	FILERS	7	78.7	83.7	2	13
16000	KILN OPERATOR	1	84.3	84.3	2	2
11401	DEBARKER OPERATOR	2	77.0	78.4	0	0
13100	GANG SAW OPERATOR	2	77.0	77.0	0	0
19700	MOULDER OFFBEARER	1	77.5	78.2	0	0
11400	DEBARKER OPERATOR	2	76.1	77.2	0	0
15100	GREEN CHAIN PULLER	2	76.0	76.0	0	0
14000	RESAW OPERATOR	2	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                                    BBN JOB NO.   9635

                         PERSONNEL NOISE EXPOSURE AND IMPACT

                                    EPA CRITERIA

SIC CODE =  242                PLANT NO. =  2               NO DATES SPECIFIED

  JOB     JOB DESCRIPTION            NO. OF    SOUND   LEVEL     LEV. WT. POP.
 CODE                                PERS.      MEAN    W.C.      MEAN    W.C.

20700     RAILCAR LOADER                2     <75.0   <75.0         0       0
22300     MECHANICS                     1     <75.0   <75.0         0       0
10700     POND SORTER                   2     <75.0   <75.0         0       0
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ENVIRONMENTAL PROTECTION AGENCY                                 BBN JOB NO.   9635

                         PERSONNEL NOISE EXPOSURE AND IMPACT

                          THRESHOLD LEVEL         = 90.0 DBA
                          8-HR PERMISSIBLE LEVEL = 90.0 DBA
                          EXCHANGE RATE           = 5 DBA

SIC CODE =  242               PLANT NO. =  2              NO DATES SPECIFIED

 JOB      JOB DESCRIPTION          NO. OF     SOUND LEVEL      DAILY NOISE DOSE
 CODE                              PERS.     MEAN    W.C.      MEAN     W.C.

13700     CHIPPER OPERATOR            2      97.7    99.2      2.93      3.56
12800     QUADSAW TAIL SAWYER         2      97.0    97.0      2.64      2.64
14800     TRIMMER OPERATOR            2      95.0    95.0      2.00      2.00
18500     RIPSAW OPERATOR             1      94.0    94.0      1.74      1.74
13400     EDGER OPERATOR              6      93.0    93.7      1.52      1.67
14300     UNSCRAMBLE OPERATOR         2      93.0    93.0      1.52      1.52
26100     CLEAN-UP MAN/REGULAR        1      93.0    93.0      1.52      1.52
13300     SLAB BOARD PULLER           2      92.5    93.2      1.41      1.56
22800     ELECTRICIANS                3      92.1    92.1      1.34      1.34
23300     CARPENTERS                  1      92.1    92.1      1.34      1.34
17300     GRADER/PLANER MILL          8      92.0    92.0      1.32      1.32
18600     RIPSAW OFFBEARER            1      92.0    92.0      1.32      1.32
10100     SAWMILL SUPERVISOR          2      91.7    91.7      1.27      1.27
21100     MILLWRIGHT/GENERAL          5      91.7    91.7      1.27      1.27
24500     OILER                       2      91.7    91.7      1.27      1.27
21900     MACHINISTS                  5     <90.0   <90.0      0.88      0.88
12300     SAWYER                      4     <90.0   <90.0      0.68      0.68
26500     LABORER                     1     <90.0   <90.0      0.60      0.60
23800     PIPE-FITTERS                1     <90.0   <90.0      0.52      0.52
19600     MOULDER FEEDER              1     <90.0   <90.0      0.40      0.40
16700     PLANER OPERATOR             4     <90.0   <90.0      0.26      0.29
16100     UNSTACKER-DRY               2     <90.0   <90.0      0.23      0.23
10700     POND SORTER                 2     <90.0   <90.0      0.00      0.0
11400     DEBARKER OPERATOR           2     <90.0   <90.0      0.00      0.0
11401     DEBARKER OPERATOR           2     <90.0   <90.0      0.00      0.0
13100     GANG SAW OPERATOR           2     <90.0   <90.0      0.00      0.0
14000     RESAW OPERATOR              2     <90.0   <90.0      0.00      0.0
14500     GREEN CHAIN OPERATOR        2     <90.0   <90.0      0.00      0.0
15100     GREEN CHAIN PULLER          2     <90.0   <90.0      0.00      0.0
15400     STACKER-GREEN               2     <90.0    92.4      0.00      1.40
15401     STACKER-GREEN               2     <90.0    95.5      0.00      2.16
15500     STICKERMAN-GREEN            2     <90.0   <90.0      0.00      0.0
15900     TRANSFER OPERATOR           2     <90.0   <90.0      0.00      0.0
16000     KILN OPERATOR               1     <90.0   <90.0      0.00      0.0
17600     DRY CHAIN PULLER           14     <90.0   <90.0      0.00      0.0
17900     BANDER OPERATOR             2     <90.0   <90.0      0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                               BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT

                     THRESHOLD LEVEL         = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                     EXCHANGE RATE           = 5 DBA

 SIC CODE =  242               PLANT NO. =  2             NO DATES SPECIFIED

  JOB        JOB DESCRIPTION          NO. OF      SOUND LEVEL      DAILY NOISE DOSE
 CODE                                 PERS.       MEAN    W.C.      MEAN     W.C.

19700      MOULDER OFFBEARER              1     <90.0   <90.0      0.00      0.0
20100      LUMBER CARRIER OPER            3     <90.0   <90.0      0.00      0.0
20200      FORKLIFT OPERATOR              5     <90.0   <90.0      0.00      0.0
20700      RAILCAR LOADER                 2     <90.0   <90.0      0.00      0.0
22300      MECHANICS                      1     <90.0   <90.0      0.00      0.0
24400      FILERS                         7     <90.0   <90.0      0.00      0.0
24800      POWERHOUSE OPERATOR            3     <90.0   <90.0      0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	LEV. WT. POP. MEAN	LEV. WT. POP. W.C.
173	GRADER/PLANER MILL	8	92.0	92.0	57	57
134	EDGER OPERATOR	6	93.0	93.7	48	52
211	MILLWRIGHT/GENERAL	5	92.7	92.7	39	39
167	PLANER OPERATOR	4	93.8	94.2	35	36
176	DRY CHAIN PULLER	14	84.8	85.7	33	47
219	MACHINISTS	5	90.8	90.8	31	31
137	CHIPPER OPERATOR	2	99.4	101.2	29	34
123	SAWYER	4	91.6	91.6	27	27
202	FORKLIFT OPERATOR	5	89.4	89.4	25	25
228	ELECTRICIANS	3	93.0	93.0	24	24
128	QUADSAW TAIL SAWYER	2	97.0	97.0	24	24
148	TRIMMER OPERATOR	2	95.0	95.0	19	19
143	UNSCRAMBLE OPERATOR	2	93.0	93.0	16	16
101	SAWMILL SUPERVISOR	2	92.7	92.7	15	15
245	OILER	2	92.7	92.7	15	15
133	SLAB BOARD PULLER	2	92.5	93.2	15	16
154	STACKER-GREEN	4	86.5	94.7	13	38
161	UNSTACKER-DRY	2	88.6	88.6	9	9
185	RIPSAW OPERATOR	1	94.0	94.0	9	9
261	CLEAN-UP MAN/REGULAR	1	93.0	93.0	8	8
233	CARPENTERS	1	93.0	93.0	8	8
186	RIPSAW OFFBEARER	1	92.0	92.0	7	7
155	STICKERMAN-GREEN	2	85.2	85.2	5	5
238	PIPE-FITTERS	1	89.3	89.3	5	5
265	LABORER	1	89.1	89.1	5	5
179	BANDER OPERATOR	2	85.0	85.0	4	4
201	LUMBER CARRIER OPER	3	83.0	84.4	4	6
248	POWERHOUSE OPERATOR	3	83.0	84.4	4	6
196	MOULDER FEEDER	1	88.7	88.7	4	4
145	GREEN CHAIN OPERATOR	2	84.0	85.4	4	5
159	TRANSFER OPERATOR	2	82.4	82.4	2	2
244	FILERS	7	78.7	83.7	2	13
160	KILN OPERATOR	1	84.3	84.3	2	2
114	DEBARKER OPERATOR	4	76.6	77.8	0	0
131	GANG SAW OPERATOR	2	77.0	77.0	0	0
197	MOULDER OFFBEARER	1	77.5	78.2	0	0
151	GREEN CHAIN PULLER	2	76.0	76.0	0	0
140	RESAW OPERATOR	2	<75.0	<75.0	0	0
207	RAILCAR LOADER	2	<75.0	<75.0	0	0
223	MECHANICS	1	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                 PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                 EPA CRITERIA

SIC CODE =  242               PLANT NO. =  2              NO DATES SPECIFIED

 JOB      JOB DESCRIPTION            NO. OF   SOUND   LEVEL      LEV. WT. POP.
CODE                                 PERS.     MEAN    W.C.       MEAN    W.C.

 107      POND SORTER                   2    <75.0   <75.0          0        0



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TOTAL NUMBER OF PERSONNEL                                     119
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                112
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                112
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                 53
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                 57
LEVEL WEIGHTED POPULATION (MEAN)                              561.5
LEVEL WEIGHTED POPULATION (W.C.)                              629.3

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
137	CHIPPER OPERATOR	2	97.7	99.2	2.93	3.56
128	QUADSAW TAIL SAWYER	2	97.0	97.0	2.64	2.64
148	TRIMMER OPERATOR	2	95.0	95.0	2.00	2.00
185	RIPSAW OPERATOR	1	94.0	94.0	1.74	1.74
134	EDGER OPERATOR	6	93.0	93.7	1.52	1.67
143	UNSCRAMBLE OPERATOR	2	93.0	93.0	1.52	1.52
261	CLEAN-UP MAN/REGULAR	1	93.0	93.0	1.52	1.52
133	SLAB BOARD PULLER	2	92.5	93.2	1.41	1.56
228	ELECTRICIANS	3	92.1	92.1	1.34	1.34
233	CARPENTERS	1	92.1	92.1	1.34	1.34
173	GRADER/PLANER MILL	8	92.0	92.0	1.32	1.32
186	RIPSAW OFFBEARER	1	92.0	92.0	1.32	1.32
101	SAWMILL SUPERVISOR	2	91.7	91.7	1.27	1.27
211	MILLWRIGHT/GENERAL	5	91.7	91.7	1.27	1.27
245	OILER	2	91.7	91.7	1.27	1.27
219	MACHINISTS	5	<90.0	<90.0	0.88	0.88
123	SAWYER	4	<90.0	<90.0	0.68	0.68
265	LABORER	1	<90.0	<90.0	0.60	0.60
238	PIPE-FITTERS	1	<90.0	<90.0	0.52	0.52
196	MOULDER FEEDER	1	<90.0	<90.0	0.40	0.40
167	PLANER OPERATOR	4	<90.0	<90.0	0.26	0.29
161	UNSTACKER-DRY	2	<90.0	<90.0	0.23	0.23
107	POND SORTER	2	<90.0	<90.0	0.00	0.0
114	DEBARKER OPERATOR	4	<90.0	<90.0	0.00	0.0
131	GANG SAW OPERATOR	2	<90.0	<90.0	0.00	0.0
140	RESAW OPERATOR	2	<90.0	<90.0	0.00	0.0
145	GREEN CHAIN OPERATOR	2	<90.0	<90.0	0.00	0.0
151	GREEN CHAIN PULLER	2	<90.0	<90.0	0.00	0.0
154	STACKER-GREEN	4	<90.0	94.2	0.00	1.78
155	STICKERMAN-GREEN	2	<90.0	<90.0	0.00	0.0
159	TRANSFER OPERATOR	2	<90.0	<90.0	0.00	0.0
160	KILN OPERATOR	1	<90.0	<90.0	0.00	0.0
176	DRY CHAIN PULLER	14	<90.0	<90.0	0.00	0.0
179	BANDER OPERATOR	2	<90.0	<90.0	0.00	0.0
197	MOULDER OFFBEARER	1	<90.0	<90.0	0.00	0.0
201	LUMBER CARRIER OPER	3	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY
                                                              BBN JOB NO.   9635
            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                     THRESHOLD LEVEL          = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE            = 5 DBA

SIC CODE =  242              PLANT NO. =  2            NO DATES SPECIFIED

 JOB      JOB DESCRIPTION           NO. OF     SOUND LEVEL      DAILY NOISE DOSE
CODE                                PERS.      MEAN     W.C.     MEAN     W.C.

 202      FORKLIFT OPERATOR            5      <90.0    <90.0     0.00      0.0
 207      RAILCAR LOADER               2      <90.0    <90.0     0.00      0.0
 223      MECHANICS                    1      <90.0    <90.0     0.00      0.0
 244      FILERS                       7      <90.0    <90.0     0.00      0.0
 248      POWERHOUSE OPERATOR          3      <90.0    <90.0     0.00      0.0




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            TOTAL NUMBER OF PERSONNEL              =     119
            TOTAL NUMBER OVEREXPOSED (MEAN)  =      40
            TOTAL NUMBER OVEREXPOSED (W.C.)  =      44

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	H.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1741	DRY CHAIN CONVEYR	3	85.0	87.0	29	13.2	0.118
1822	QUADSAW	1	90.0	90.0	72	11.1	0.099
1716	PLANER/ENCL	2	92.0	92.0	21	8.5	0.076
1623	HEADRIG	1	93.0	93.0	40	7.6	0.068
1638	EDGER	3	93.0	94.0	25	6.2	0.056
1702	PLANER	2	108.5	109.2	17	6.1	0.054
1690	KILN CHAIN CONVYR	3	87.0	95.5	7	5.3	0.047
1831	GANG SAW	1	77.0	77.0	51	5.1	0.046
1802	FORKLIFT	1	90.0	90.0	6	4.6	0.041
1603	DEBARKER	2	77.0	78.4	13	3.6	0.032
1654	RESAW-LARGE	1	74.0	74.0	13	3.3	0.029
1796	POWERHOUSE	1	90.0	90.0	4	3.0	0.027
1682	GREEN CHAIN CONVY	2	84.0	85.4	6	2.7	0.024
1752	STACK BANDER	1	85.0	85.0	7	2.4	0.021
1639	EDGER	2	92.5	93.2	4	2.2	0.020
1711	PLANER/ENCL	2	90.0	90.0	17	2.1	0.019
1670	TRIMMER	1	95.0	95.0	2	2.0	0.018
1672	TRIMMER	2	93.0	93.0	2	2.0	0.018
1681	GREEN CHAIN CONVY	1	76.0	76.0	2	2.0	0.018
1824	QUADSAW	1	97.0	97.0	2	2.0	0.018
1692	KILN CHAIN CONVYR	2	87.0	89.8	17	2.0	0.017
1637	EDGER	3	93.0	94.0	6	1.8	0.016
1784	CHIPPER	10	104.8	106.8	3	1.7	0.015
1691	KILN CHAIN CONVYR	1	86.0	86.0	2	1.6	0.014
1694	KILN CHAIN CONVYR	1	83.0	83.0	14	1.1	0.010
1731	MOULDER/ENCL	2	77.5	78.2	1	1.0	0.009
1853	RIPSAW-SPECIALTY	1	92.0	92.0	1	1.0	0.009
1851	RIPSAW-SPECIALTY	1	94.0	94.0	1	1.0	0.009
1734	MOULDER	1	95.0	95.0	1	0.9	0.008
1815	TRANSFER CARRIER	1	80.0	80.0	3	0.6	0.005

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1602	DEBARKER	2	74.0	74.0	2	0.4	0.004
1617	CUT-OFF SAW	1	75.8	75.8	11	0.3	0.002
1830	GANG SAW	1	77.0	77.0	2	0.2	0.002
1727	MOULDER/ENCL	1	81.0	81.0	1	0.1	0.001
1622	HEADRIG	1	89.0	89.0	4	0.1	0.001
1687	KILN	1	85.0	85.0	1	0.1	0.001
1783	CHIPPER	3	90.7	94.8	2	0.1	0.001
1513	WHEEL GRINDER	1	79.0	79.0	6	0.0	0.000

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                          EQUIPMENT NOISE CONTROL PRIORITY

                          THRESHOLD LEVEL         = 90.0 DBA
                          8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                          EXCHANGE RATE           = 5 DBA

SIC CODE =  242                PLANT NO. =  2              NO DATES SPECIFIED

EQUIP.        EQUIPMENT              NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION             UNITS     LD       LD    PERS.    INDEX     P.I.

 1716      PLANER/ENCL                  2     92.0     92.0     13        8.2    0.205
 1638      EDGER                        3     93.0     94.0     19        5.8    0.146
 1822      QUADSAW                      1     90.0     90.0     48        4.5    0.113
 1654      RESAW-LARGE                  1     74.0     74.0     13        2.8    0.070
 1639      EDGER                        2     92.5     93.2      4        2.5    0.062
 1831      GANG SAW                     1     77.0     77.0     35        2.1    0.054
 1670      TRIMMER                      1     95.0     95.0      2        2.0    0.050
 1672      TRIMMER                      2     93.0     93.0      2        2.0    0.050
 1824      QUADSAW                      1     97.0     97.0      2        2.0    0.050
 1637      EDGER                        3     93.0     94.0      6        1.8    0.045
 1702      PLANER                       2    108.5    109.2      5        1.5    0.038
 1784      CHIPPER                     10    104.8    106.8      2        1.3    0.033
 1623      HEADRIG                      1     93.0     93.0     22        1.0    0.026
 1851      RIPSAW-SPECIALTY             1     94.0     94.0      1        1.0    0.025
 1853      RIPSAW-SPECIALTY             1     92.0     92.0      1        1.0    0.025
 1711      PLANER/ENCL                  2     90.0     90.0      5        0.2    0.005
 1783      CHIPPER                      3     90.7     94.8      2        0.2    0.005
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	H.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1699	PLANER	6	96.8	97.2	55	16.7	0.149
1739	DRY CHAIN	3	85.0	87.0	29	13.2	0.118
1819	QUADSAW	3	94.0	94.0	74	13.1	0.117
1629	EDGER	8	92.9	93.8	35	10.3	0.092
1688	KILN CHAIN	7	86.3	93.5	40	9.9	0.088
1620	HEADRIG	2	91.0	91.0	44	7.7	0.069
1828	GANG SAW	2	77.0	77.0	53	5.3	0.048
1679	GREEN CHAIN	3	81.3	82.7	8	4.7	0.042
1800	FORKLIFT	1	90.0	90.0	6	4.6	0.041
1600	DEBARKER	4	75.5	76.5	15	4.0	0.036
1664	TRIMMER	3	93.7	93.7	4	4.0	0.036
1644	RESAW/LARGE	2	74.0	74.0	13	3.3	0.029
1792	POWERHOUSE	1	90.0	90.0	4	3.0	0.027
1810	LUMBER CARRIER	2	83.0	84.4	3	3.0	0.027
1749	STACK BANDER	2	81.5	81.5	7	2.4	0.021
1724	MOULDER	6	84.7	85.4	3	2.0	0.018
1848	RIP SAW/SPECIALTY	4	88.0	88.0	2	2.0	0.018
1779	CHIPPER	13	101.5	104.1	5	1.8	0.016
1813	TRANSFER CARRIER	1	80.0	80.0	3	0.6	0.005
1610	CUT-OFF	2	84.9	84.9	11	0.3	0.002
1685	KILN	1	85.0	85.0	1	0.1	0.001

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                  EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                       THRESHOLD LEVEL          = 90.0 DBA
                       8-HR PERMISSIBLE LEVEL = 90.0 DBA
                       EXCHANGE RATE            = 5 DBA

SIC CODE =  242               PLANT NO. =  2            NO DATES SPECIFIED

EQUIP.       EQUIPMENT             NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION            UNITS     LJ       LJ    PERS.    INDEX     P.I.

 1629     EDGER                      8      92.9     93.8     29      10.1    0.253
 1699     PLANER                     6      96.8     97.2     23       9.9    0.248
 1819     QUADSAW                    3      94.0     94.0     50       6.5    0.163
 1664     TRIMMER                    3      93.7     93.7      4       4.0    0.100
 1644     RESAW/LARGE                2      74.0     74.0     13       2.8    0.070
 1828     GANG SAW                   2      77.0     77.0     35       2.1    0.054
 1848     RIP SAW/SPECIALTY          4      88.0     88.0      2       2.0    0.050
 1779     CHIPPER                   13     101.5    104.1      4       1.5    0.038
 1620     HEADRIG                    2      91.0     91.0     22       1.0    0.026
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Plant No. 3

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
15100	GREEN CHAIN PULLER	12	95.0	95.0	119	119
16700	PLANER OPERATOR	3	106.6	106.6	74	74
17300	GRADER/PLANER MILL	6	96.0	95.0	66	66
17600	DRY CHAIN PULLER	12	88.6	92.1	55	87
20200	FORKLIFT OPERATOR	8	90.0	90.0	44	44
14800	TRIMMER OPERATOR	3	95.8	95.8	32	32
14000	RESAW OPERATOR	3	95.4	95.4	31	31
14400	LUMBER DIVERTER	3	94.8	94.8	29	29
10100	SAWMILL SUPERVISOR	3	94.3	94.3	28	28
10400	PLANER SUPERVISOR	3	94.3	94.3	28	28
21200	MILLWRIGHT/SAWMILL	3	94.3	94.3	27	27
14801	TRIMMER OPERATOR	3	93.6	93.6	26	26
13400	EDGER OPERATOR	3	92.9	92.9	23	23
21300	MILLWRIGHT/PLANER	3	90.6	91.9	18	21
24800	POWERHOUSE OPERATOR	3	87.8	87.8	12	12
15400	STACKER-GREEN	3	87.5	94.9	11	29
15500	STICKERMAN-GREEN	3	85.7	88.2	8	13
24400	FILERS	4	84.0	84.0	8	8
11400	DEBARKER OPERATOR	3	85.1	85.1	7	7
26100	CLEAN-UP MAN/REGULAR	1	91.3	91.3	6	6
26500	LABORER	1	88.4	89.7	4	5
12300	SAWYER	3	79.0	79.0	1	1
18200	TALLYMEN	3	<75.0	<75.0	0	0
20700	RAILCAR LOADER	2	<75.0	<75.0	0	0
26200	CLEAN-UP MAN/DOWN TM	1	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT

                     THRESHOLD LEVEL          = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE            = 5 DBA

SIC CODE =  242              PLANT NO. =  3          NO DATES SPECIFIED

 JOB      JOB DESCRIPTION         NO. OF     SOUND LEVEL    DAILY NOISE DOSE
 CODE                             PERS.      MEAN    W.C.    MEAN      W.C.

16700     PLANER OPERATOR            3      105.0   105.0    7.95      7.95
17300     GRADER/PLANER MILL         6       96.0    96.0    2.30      2.30
14800     TRIMMER OPERATOR           3       95.6    95.6    2.18      2.18
14000     RESAW OPERATOR             3       95.4    95.4    2.10      2.10
15100     GREEN CHAIN PULLER        12       95.0    95.0    2.00      2.00
14400     LUMBER DIVERTER            3       94.6    94.6    1.90      1.90
10100     SAWMILL SUPERVISOR         3       93.4    93.4    1.59      1.59
10400     PLANER SUPERVISOR          3       93.4    93.4    1.59      1.59
21200     MILLWRIGHT/SAWMILL         3       93.3    93.3    1.57      1.57
14801     TRIMMER OPERATOR           3       93.2    93.2    1.57      1.57
13400     EDGER OPERATOR             3       92.5    92.6    1.44      1.44
26100     CLEAN-UP MAN/REGULAR       1      <90.0   <90.0    0.96      0.96
21300     MILLWRIGHT/PLANER          3      <90.0   <90.0    0.76      0.92
26500     LABORER                    1      <90.0   <90.0    0.45      0.55
11400     DEBARKER OPERATOR          3      <90.0   <90.0    0.00      0.0
12300     SAWYER                     3      <90.0   <90.0    0.00      0.0
15400     STACKER-GREEN              3      <90.0    94.5    0.00      1.87
15500     STICKERMAN-GREEN           3      <90.0   <90.0    0.00      0.21
17600     DRY CHAIN PULLER          12      <90.0    91.7    0.00      1.26
18200     TALLYMEN                   3      <90.0   <90.0    0.00      0.0
20200     FORKLIFT OPERATOR          8      <90.0   <90.0    0.00      0.0
20700     RAILCAR LOADER             2      <90.0   <90.0    0.00      0.0
24400     FILERS                     4      <90.0   <90.0    0.00      0.0
24800     POWERHOUSE OPERATOR        3      <90.0   <90.0    0.00      0.0
26200     CLEAN-UP MAN/DOWN TM       1      <90.0   <90.0    0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                  PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                   EPA CRITERIA

SIC CODE =  242              PLANT NO. =  3              NO DATES SPECIFIED

 JOB      JOB DESCRIPTION             NO. OF     SOUND    LEVEL       LEV. WT. POP.
CODE                                  PERS.       MEAN     W.C.        MEAN     W.C.

 151      GREEN CHAIN PULLER            12        95.0     95.0         119      119
 167      PLANER OPERATOR                3       106.6    106.6          74       74
 173      GRADER/PLANER MILL             6        96.0     95.0          66       66
 148      TRIMMER OPERATOR               6        94.7     94.7          58       58
 176      DRY CHAIN PULLER              12        88.6     92.1          55       87
 202      FORKLIFT OPERATOR              8        90.0     90.0          44       44
 140      RESAW OPERATOR                 3        95.4     95.4          31       31
 144      LUMBER DIVERTER                3        94.8     94.8          29       29
 101      SAWMILL SUPERVISOR             3        94.3     94.3          28       28
 104      PLANER SUPERVISOR              3        94.3     94.3          28       28
 212      MILLWRIGHT/SAWMILL             3        94.3     94.3          27       27
 134      EDGER OPERATOR                 3        92.9     92.9          23       23
 213      MILLWRIGHT/PLANER              3        90.6     91.9          18       21
 248      POWERHOUSE OPERATOR            3        87.8     87.8          12       12
 154      STACKER-GREEN                  3        87.5     94.9          11       29
 155      STICKERMAN-GREEN               3        85.7     88.2           8       13
 244      FILERS                         4        84.0     84.0           8        8
 114      DEBARKER OPERATOR              3        85.1     85.1           7        7
 261      CLEAN-UP MAN/REGULAR           1        91.3     91.3           6        6
 265      LABORER                        1        88.4     89.7           4        5
 123      SAWYER                         3        79.0     79.0           1        1
 182      TALLYMEN                       3       <75.0    <75.0           0        0
 207      RAILCAR LOADER                 2       <75.0    <75.0           0        0
 262      CLEAN-UP MAN/DOWN TM           1       <75.0    <75.0           0        0
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ENVIRONMENTAL PROTECTION AGENCY
                                                          BBN JOB NO.   9635
             PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                          EPA CRITERIA

SIC CODE =  242              PLANT NO. =  3            NO DATES SPECIFIED



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TOTAL NUMBER OF PERSONNEL                                  95
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)             89
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)             89
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)             49
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)             64
LEVEL WEIGHTED POPULATION (MEAN)                          667.7
LEVEL WEIGHTED POPULATION (W.C.)                          725.4

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ENVIRONMENTAL PROTECTION AGENCY                           BBN JOB NO.    9635

          PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                 THRESHOLD LEVEL         = 90.0 DBA
                 8-HR PERMISSIBLE LEVEL = 90.0 DBA
                 EXCHANGE RATE           = 5 DBA

SIC CODE =  242            PLANT NO. =  3            NO DATES SPECIFIED

 JOB      JOB DESCRIPTION         NO. OF     SOUND LEVEL     DAILY NOISE DOSE
CODE                              PERS.      MEAN    W.C.     MEAN     W.C.

 167      PLANER OPERATOR            3      105.0   105.0     7.95      7.95
 173      GRADER/PLANER MILL         6       96.0    95.0     2.30      2.30
 140      RESAW OPERATOR             3       95.4    95.4     2.10      2.10
 151      GREEN CHAIN PULLER        12       95.0    95.0     2.00      2.00
 144      LUMBER DIVERTER            3       94.6    94.6     1.90      1.90
 148      TRIMMER OPERATOR           6       94.5    94.5     1.87      1.87
 101      SAWMILL SUPERVISOR         3       93.4    93.4     1.59      1.59
 104      PLANER SUPERVISOR          3       93.4    93.4     1.59      1.59
 212      MILLWRIGHT/SAWMILL         3       93.3    93.3     1.57      1.57
 134      EDGER OPERATOR             3       92.6    92.6     1.44      1.44
 261      CLEAN-UP MAN/REGULAR       1      <90.0   <90.0     0.96      0.96
 213      MILLWRIGHT/PLANER          3      <90.0   <90.0     0.76      0.92
 265      LABORER                    1      <90.0   <90.0     0.45      0.55
 114      DEBARKER OPERATOR          3      <90.0   <90.0     0.00      0.0
 123      SAWYER                     3      <90.0   <90.0     0.00      0.0
 154      STACKER-GREEN              3      <90.0    94.5     0.00      1.87
 155      STICKERMAN-GREEN           3      <90.0   <90.0     0.00      0.21
 176      DRY CHAIN PULLER          12      <90.0    91.7     0.00      1.26
 182      TALLYMEN                   3      <90.0   <90.0     0.00      0.0
 202      FORKLIFT OPERATOR          8      <90.0   <90.0     0.00      0.0
 207      RAILCAR LOADER             2      <90.0   <90.0     0.00      0.0
 244      FILERS                     4      <90.0   <90.0     0.00      0.0
 248      POWERHOUSE OPERATOR        3      <90.0   <90.0     0.00      0.0
 262      CLEAN-UP MAN/DOWN TM       1      <90.0   <90.0     0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                         BBN JOB NO.   9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                THRESHOLD LEVEL          = 90.0 DBA
                8-HR PERMISSIBLE LEVEL = 90.0 DBA
                EXCHANGE RATE            = 5 DBA

SIC CODE =  242              PLANT NO. =  3            NO DATES SPECIFIED




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              TOTAL NUMBER OF PERSONNEL          =       95
              TOTAL NUMBER OVEREXPOSED (MEAN) =       45
              TOTAL NUMBER OVEREXPOSED (W.C.) =       60

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                        PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE =  332                                              NO DATES SPECIFIED
PLANT NOS. =    7,  6,  5,  4,  3,  2,  1,

 JOB        JOB DESCRIPTION           NO. OF     EQUIP.     WOR. MEAN     WOR. STD.
CODE                                  PERS.      CODE      TIME-8HRS     DEVIATION

27000    FOREMAN                         1        1104         1.6           0.0
                                                  1175         0.8           0.0
                                                  1440         1.6           0.0
                                                  1435         3.2           0.0
                                                  1543         0.8           0.0

26600    HELPER                          6        1386         7.2           0.0
                                                  1485         0.8           0.0

26504    LABORER                         2        1000         8.0           0.0

26503    LABORER                         2        1435         4.0           0.0
                                                  1102         0.8           0.0
                                                  1536         0.8           0.0
                                                  1485         0.8           0.0
                                                  1336         1.6           0.0

26502    LABORER                         2        1435         8.0           0.0

26501    LABORER                         6        1435         4.8           0.0
                                                  1436         0.8           0.0
                                                  1104         0.8           0.0
                                                  1485         0.8           0.0
                                                  1334         0.8           0.0

26500    LABORER                         1        1373         4.0           0.0
                                                  1435         2.4           0.0
                                                  1104         1.2           0.0
                                                  1485         0.4           0.0

26410    SERVICEMAN                      2        1435         8.0           0.0

26409    SERVICEMAN                      4        1000         2.0           0.0
                                                  1334         2.0           0.0
                                                  1536         3.6           0.0
                                                  1481         0.4           0.0
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PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332 NO DATES SPECIFIED
PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
26408	SERVICEMAN	2	1000	3.2	0.0
			1334	1.6	0.0
			1536	1.6	0.0
			1481	0.8	0.0
			1543	0.8	0.0
26407	SERVICEMAN	2	1000	3.2	0.0
			1386	2.4	0.0
			1536	2.4	0.0
26406	SERVICEMAN	4	1102	2.4	0.0
			1159	2.4	0.0
			1194	3.2	0.0
26405	SERVICEMAN	2	1102	4.0	0.0
			1159	4.0	0.0
26404	SERVICEMAN	2	1386	4.8	0.0
			1536	3.2	0.0
26403	SERVICEMAN	2	1102	1.6	0.0
			1334	3.2	0.0
			1536	3.2	0.0
26402	SERVICEMAN	4	1193	6.0	0.0
			1188	2.0	0.0
26401	SERVICEMAN	2	1102	4.0	0.0
			1186	1.2	0.0
			1159	2.0	0.0
			1000	0.8	0.0
26400	SERVICEMAN	2	1188	4.0	0.0
			1102	4.0	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL WORK ASSIGNMENT AVERAGES

SIC CODE = 332

PLANT NOS. = 7, 6, 5, 4, 3, 2, 1,

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	EQUIP. CODE	NOR. MEAN TIME-8HRS	NOR. STD. DEVIATION
20300	WORKSAVER OPERATOR	6	1158	1.6	0.0
			1102	4.8	0.0
			1159	1.6	0.0
20203	FORKLIFT OPERATOR	2	1338	1.2	0.0
			1440	1.2	0.0
			1438	1.2	0.0
			1490	2.0	0.0
			1485	2.4	0.0
20202	FORKLIFT OPERATOR	2	1000	3.2	0.0
			1435	0.8	0.0
			1538	2.4	0.0
			1334	0.8	0.0
			1341	0.8	0.0
20201	FORKLIFT OPERATOR	2	1000	7.2	0.0
			1435	0.8	0.0
20200	FORKLIFT OPERATOR	2	1000	2.0	0.0
			1485	2.4	0.0
			1498	2.0	0.0
			1802	1.6	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1683	GREEN CHAIN CONVY	1	95.0	95.0	53	16.6	0.186
1741	DRY CHAIN CONVEYR	3	89.0	92.6	19	11.7	0.131
1623	HEADRIG	1	80.0	80.0	31	7.6	0.085
1638	EDGER	1	93.0	93.0	31	7.4	0.084
1716	PLANER/ENCL	2	96.0	96.0	10	6.3	0.071
1702	PLANER	1	115.0	115.0	7	4.8	0.054
1647	RESAW-LARGE	1	96.0	96.0	13	4.8	0.054
1672	TRIMMER	1	94.0	94.0	13	3.9	0.044
1670	TRIMMER	1	96.0	96.0	7	3.0	0.034
1603	DEBARKER	1	86.0	86.0	3	2.6	0.029
1691	KILN CHAIN CONVYR	2	85.5	91.9	3	2.6	0.029
1682	GREEN CHAIN CONVY	1	80.0	80.0	38	2.1	0.024
1794	POWERHOUSE	1	91.0	91.0	3	1.5	0.017
1796	POWERHOUSE	1	87.0	87.0	3	1.5	0.017
1693	BACK. ONLY CONTR.	1	62.5	90.0	28	1.3	0.015
1711	PLANER/ENCL	1	102.0	102.0	7	1.3	0.014
1646	RESAW-LARGE	1	94.0	94.0	3	0.8	0.009
1694	KILN CHAIN CONVYR	1	83.0	83.0	12	0.4	0.004
1602	DEBARKER	1	82.0	82.0	3	0.4	0.004
1622	HEADRIG	1	75.0	75.0	3	0.4	0.004
1617	CUT-OFF SAW	1	82.0	82.0	3	0.1	0.001
1637	EDGER	1	89.0	89.0	3	0.1	0.001
1802	FORKLIFT	1	90.0	90.0	3	0.0	0.000

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                   EQUIPMENT NOISE CONTROL PRIORITY

                   THRESHOLD LEVEL          = 90.0 DBA
                   8-HR PERMISSIBLE LEVEL = 90.0 DBA
                   EXCHANGE RATE            = 5 DBA

SIC CODE =  242            PLANT NO. =  3            NO DATES SPECIFIED

EQUIP.      EQUIPMENT          NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE      DESCRIPTION         UNITS     LJ       LJ    PERS.    INDEX     P.I.

 1683    GREEN CHAIN CONVY       1      95.0     95.0     24      15.3    0.339
 1716    PLANER/ENCL             2      96.0     96.0      6       6.0    0.133
 1638    EDGER                   1      93.0     93.0     24       5.8    0.130
 1647    RESAW-LARGE             1      96.0     96.0     12       4.5    0.099
 1672    TRIMMER                 1      94.0     94.0     12       4.1    0.091
 1670    TRIMMER                 1      96.0     96.0      3       3.0    0.067
 1623    HEADRIG                 1      80.0     80.0     21       2.1    0.047
 1711    PLANER/ENCL             1     102.0    102.0      3       1.8    0.040
 1702    PLANER                  1     115.0    115.0      3       1.2    0.027
 1646    RESAW-LARGE             1      94.0     94.0      3       0.9    0.019
 1682    GREEN CHAIN CONVY       1      80.0     80.0      9       0.3    0.00
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375<

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1679	GREEN CHAIN	2	87.5	87.5	91	18.7	0.210
1699	PLANER	5	100.4	100.4	24	12.4	0.140
1739	DRY CHAIN	3	89.0	92.6	19	11.7	0.131
1800	FORKLIFT	1	90.0	90.0	11	8.0	0.090
1620	HEADRIG	2	77.5	77.5	34	7.9	0.089
1629	EDGER	2	91.0	91.0	34	7.5	0.084
1664	TRIMMER	3	94.7	94.7	20	7.0	0.078
1644	RESAW/LARGE	2	95.0	95.0	16	5.5	0.062
1688	KILN CHAIN	7	84.9	91.7	43	4.3	0.048
1792	POWERHOUSE	2	89.0	89.0	6	3.0	0.033
1600	DEBARKER	2	84.0	84.0	6	2.9	0.033
1610	CUT-OFF	2	84.0	84.0	3	0.1	0.001

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ENVIRONMENTAL PROTECTION AGENCY                        BBN JOB NO.   9635

              EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                  THRESHOLD LEVEL          = 90.0 DBA
                  8-HR PERMISSIBLE LEVEL = 90.0 DBA
                  EXCHANGE RATE            = 5 DBA

SIC CODE =  242             PLANT NO. =  3           NO DATES SPECIFIED

EQUIP.        EQUIPMENT          NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION         UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1679     GREEN CHAIN              2      87.5     87.5      33       15.6    0.347
 1699     PLANER                   5     100.4    100.4      12        9.0    0.200
 1664     TRIMMER                  3      94.7     94.7      15        7.1    0.157
 1629     EDGER                    2      91.0     91.0      27        5.8    0.130
 1644     RESAW/LARGE              2      95.0     95.0      15        5.3    0.119
 1620     HEADRIG                  2      77.5     77.5      21        2.1    0.047
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Plant No. 4

ENVIRONMENTAL PROTECTION AGENCY　　　　　　　　　BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242　　　　　PLANT NO. = 4　　　　　NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND	LEVEL	LEV. WT.	POP.
			MEAN	W.C.	MEAN	W.C.
15100	GREEN CHAIN PULLER	9	91.1	91.1	58	58
14800	TRIMMER OPERATOR	3	94.7	94.7	29	29
14400	LUMBER DIVERTER	3	94.3	94.3	27	27
10100	SAWMILL SUPERVISOR	3	94.2	94.2	27	27
21200	MILLWRIGHT/SAWMILL	4	90.5	90.5	24	24
26100	CLEAN-UP MAN/REGULAR	2	91.6	91.6	13	13
20200	FORKLIFT OPERATOR	3	88.1	88.1	12	12
21600	SHOPMAN/GENERAL	1	90.2	90.2	5	5
24400	FILERS	5	80.8	80.8	4	4
12300	SAWYER	3	80.0	80.0	1	1
13400	EDGER OPERATOR	3	<75.0	<75.0	0	0
11400	DEBARKER OPERATOR	3	<75.0	<75.0	0	0
26200	CLEAN-UP MAN/DOWN TM	1	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                       PERSONNEL NOISE EXPOSURE AND IMPACT

                        THRESHOLD LEVEL         = 90.0 DBA
                        8-HR PERMISSIBLE LEVEL = 90.0 DBA
                        EXCHANGE RATE           = 5 DBA

SIC CODE =  242               PLANT NO. =  4              NO DATES SPECIFIED

 JOB       JOB DESCRIPTION         NO. OF      SOUND LEVEL      DAILY NOISE DOSE
CODE                               PERS.       MEAN    W.C.      MEAN     W.C.

14800      TRIMMER OPERATOR            3       94.6    94.6      1.90      1.90
14400      LUMBER DIVERTER             3       93.4    93.4      1.60      1.60
10100      SAWMILL SUPERVISOR          3       93.0    93.0      1.52      1.52
15100      GREEN CHAIN PULLER          9       90.4    90.4      1.06      1.06
21200      MILLWRIGHT/SAWMILL          4      <90.0   <90.0      0.80      0.80
26100      CLEAN-UP MAN/REGULAR        2      <90.0   <90.0      0.68      0.68
21600      SHOPMAN/GENERAL             1      <90.0   <90.0      0.61      0.61
20200      FORKLIFT OPERATOR           3      <90.0   <90.0      0.53      0.53
11400      DEBARKER OPERATOR           3      <90.0   <90.0      0.00      0.0
12300      SAWYER                      3      <90.0   <90.0      0.00      0.0
13400      EDGER OPERATOR              3      <90.0   <90.0      0.00      0.0
24400      FILERS                      5      <90.0   <90.0      0.00      0.0
26200      CLEAN-UP MAN/DOWN TM        1      <90.0   <90.0      0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                 PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                 EPA CRITERIA

SIC CODE =  242               PLANT NO. =  4               NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF     SOUND    LEVEL      LEV. WT. POP.
CODE                                PERS.       MEAN     W.C.        MEAN    W.C.

 151       GREEN CHAIN PULLER          9        91.1     91.1         58      58
 148       TRIMMER OPERATOR            3        94.7     94.7         29      29
 144       LUMBER DIVERTER             3        94.3     94.3         27      27
 101       SAWMILL SUPERVISOR          3        94.2     94.2         27      27
 212       MILLWRIGHT/SAWMILL          4        90.5     90.5         24      24
 261       CLEAN-UP MAN/REGULAR        2        91.6     91.6         13      13
 202       FORKLIFT OPERATOR           3        88.1     88.1         12      12
 216       SHOPMAN/GENERAL             1        90.2     90.2          5       5
 244       FILERS                      5        80.8     80.8          4       4
 123       SAWYER                      3        80.0     80.0          1       1
 134       EDGER OPERATOR              3       <75.0    <75.0          0       0
 114       DEBARKER OPERATOR           3       <75.0    <75.0          0       0
 262       CLEAN-UP MAN/DOWN TM        1       <75.0    <75.0          0       0


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TOTAL NUMBER OF PERSONNEL                                         43
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                    36
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                    36
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                    25
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                    25
LEVEL WEIGHTED POPULATION (MEAN)                                 205.6
LEVEL WEIGHTED POPULATION (W.C.)                                 205.6

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242                PLANT NO. =  4              NO DATES SPECIFIED

  JOB      JOB DESCRIPTION          NO. OF     SOUND LEVEL      DAILY NOISE DOSE
 CODE                               PERS.      MEAN    W.C.      MEAN     W.C.

  148      TRIMMER OPERATOR            3       94.6    94.6      1.90     1.90
  144      LUMBER DIVERTER             3       93.4    93.4      1.60     1.60
  101      SAWMILL SUPERVISOR          3       93.0    93.0      1.52     1.52
  151      GREEN CHAIN PULLER          9       90.4    90.4      1.06     1.06
  212      MILLWRIGHT/SAWMILL          4      <90.0   <90.0      0.80     0.80
  261      CLEAN-UP MAN/REGULAR        2      <90.0   <90.0      0.68     0.68
  216      SHOPMAN/GENERAL             1      <90.0   <90.0      0.61     0.61
  202      FORKLIFT OPERATOR           3      <90.0   <90.0      0.61     0.61
  114      DEBARKER OPERATOR           3      <90.0   <90.0      0.53     0.53
  123      SAWYER                      3      <90.0   <90.0      0.00     0.0
  134      EDGER OPERATOR              3      <90.0   <90.0      0.00     0.0
  244      FILERS                      5      <90.0   <90.0      0.00     0.0
  262      CLEAN-UP MAN/DOWN TM        1      <90.0   <90.0      0.00     0.0




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                   TOTAL NUMBER OF PERSONNEL          =      43
                   TOTAL NUMBER OVEREXPOSED (MEAN) =      18
                   TOTAL NUMBER OVEREXPOSED (W.C.) =      18

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9035

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1682	GREEN CHAIN CONVY	1	92.0	92.0	46	12.8	0.357
1623	HEADRIG	1	81.0	81.0	33	10.4	0.290
1672	TRIMMER	1	95.0	95.0	42	4.9	0.136
1638	EDGER	1	72.0	72.0	30	4.2	0.117
1683	GREEN CHAIN CONVY	1	95.0	95.0	31	3.0	0.083
1622	HEADRIG	1	76.0	76.0	3	0.4	0.010
1647	RESAW-LARGE	1	93.0	93.0	4	0.2	0.006

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242              PLANT NO. =  4               NO DATES SPECIFIED

EQUIP.        EQUIPMENT          NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION         UNITS     LJ       LJ     PERS.    INDEX     P.I.

 1682    GREEN CHAIN CONVY         1      92.0     92.0     15        9.4    0.520
 1672    TRIMMER                   1      95.0     95.0      9        3.4    0.188
 1683    GREEN CHAIN CONVY         1      95.0     95.0      3        3.0    0.167
 1623    HEADRIG                   1      81.0     81.0      6        1.3    0.075
 1638    EDGER                     1      72.0     72.0      6        0.9    0.050
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	M.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1679	GREEN CHAIN	2	93.5	93.5	77	15.9	0.440
1620	HEADRIG	2	78.5	78.5	36	10.8	0.300
1664	TRIMMER	2	94.0	94.0	42	4.9	0.136
1629	EDGER	2	70.5	70.5	30	4.2	0.117
1644	RESAW/LARGE	1	93.0	93.0	4	0.2	0.006

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

           EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                THRESHOLD LEVEL          = 90.0 DBA
                8-HR PERMISSIBLE LEVEL = 90.0 DBA
                EXCHANGE RATE            = 5 DBA

SIC CODE =  242               PLANT NO. =  4              NO DATES SPECIFIED

EQUIP.       EQUIPMENT          NO.OF   MEAN    W.C.   NO.OF   PRIORITY  NORM.
 CODE       DESCRIPTION         UNITS    LJ      LJ    PERS.    INDEX    P.I.

 1679     GREEN CHAIN              2    93.5    93.5     18       12.4  0.687
 1664     TRIMMER                  2    94.0    94.0      9        3.4  0.188
 1620     HEADRIG                  2    78.5    78.5      6        1.4  0.075
 1629     EDGER                    2    70.5    70.5      6        0.9  0.050
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Plant No. 5

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND	LEVEL	LEV. WT.	POP.
			MEAN	W.C.	MEAN	W.C.
16800	PLANER SET-UP MAN	1	105.1	105.1	22	22
17600	DRY CHAIN PULLER	4	87.9	87.9	16	16
21100	MILLWRIGHT/GENERAL	2	93.2	93.2	16	16
13400	EDGER OPERATOR	1	100.6	100.6	16	16
17300	GRADER/PLANER MILL	2	93.0	93.0	16	16
13800	HOG OPERATOR	1	99.0	99.0	16	16
16700	PLANER OPERATOR	1	95.9	97.3	14	14
20200	FORKLIFT OPERATOR	5	84.1	88.1	10	12
14400	LUMBER DIVERTER	1	95.4	97.2	10	21
14801	TRIMMER OPERATOR	1	95.1	97.0	10	12
13700	CHIPPER OPERATOR	1	94.9	100.9	10	12
16200	UNSTACKER PULLER	3	86.0	88.8	9	16
14800	TRIMMER OPERATOR	1	93.4	94.0	9	14
22800	ELECTRICIANS	1	92.7	92.7	8	9
15100	GREEN CHAIN PULLER	4	83.5	85.2	7	7
14000	RESAW OPERATOR	1	91.4	91.4	7	10
18200	TALLYMEN	1	90.9	90.9	6	6
11400	DEBARKER OPERATOR	1	90.4	90.4	6	6
15500	STICKERMAN-GREEN	1	89.1	89.7	5	5
15400	STACKER-GREEN	1	89.0	94.7	4	5
26100	CLEAN-UP MAN/REGULAR	1	86.4	86.4	4	9
16100	UNSTACKER-DRY	1	86.0	88.8	3	3
16300	GRADER/SORTING CHAIN	1	85.5	85.9	3	4
16000	KILN OPERATOR	1	82.0	89.6	2	2
26500	LABORER	1	81.8	81.8	1	5
20100	LUMBER CARRIER OPER	1	78.4	78.4	1	1
12300	SAWYER	1	75.7	75.7	0	0
12700	TAIL SAWYER	1	75.7	75.7	0	0
11100	LOG CARRIER OPER	1	<75.0	<75.0	0	0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242

PLANT NO. = 5

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
16800	PLANER SET-UP MAN	1	101.5	101.5	4.95	4.95
13400	EDGER OPERATOR	1	100.5	100.5	4.31	4.31
13800	HOG OPERATOR	1	97.0	97.0	2.64	2.64
16700	PLANER OPERATOR	1	95.8	97.2	2.25	2.72
14400	LUMBER DIVERTER	1	95.4	97.2	2.11	2.70
14801	TRIMMER OPERATOR	1	95.0	95.9	2.01	2.60
14800	TRIMMER OPERATOR	1	93.4	94.0	1.59	1.74
17300	GRADER/PLANER MILL	2	93.0	93.0	1.52	1.52
13700	CHIPPER OPERATOR	1	92.5	98.9	1.41	3.42
18200	TALLYMEN	1	90.9	90.9	1.14	1.14
14000	RESAW OPERATOR	1	90.8	90.8	1.12	1.12
21100	MILLWRIGHT/GENERAL	2	90.7	90.7	1.11	1.11
22800	ELECTRICIANS	1	90.7	90.7	1.11	1.11
11400	DEBARKER OPERATOR	1	<90.0	<90.0	0.39	0.39
26100	CLEAN-UP MAN/REGULAR	1	<90.0	<90.0	0.26	0.26
17600	DRY CHAIN PULLER	4	<90.0	<90.0	0.22	0.22
11100	LOG CARRIER OPER	1	<90.0	<90.0	0.00	0.0
12300	SAWYER	1	<90.0	<90.0	0.00	0.0
12700	TAIL SAWYER	1	<90.0	<90.0	0.00	0.0
15100	GREEN CHAIN PULLER	4	<90.0	<90.0	0.00	0.0
15400	STACKER-GREEN	1	<90.0	94.7	0.00	1.91
15500	STICKERMAN-GREEN	1	<90.0	<90.0	0.00	0.77
16000	KILN OPERATOR	1	<90.0	<90.0	0.00	0.87
16100	UNSTACKER-DRY	1	<90.0	<90.0	0.00	0.53
16200	UNSTACKER PULLER	3	<90.0	<90.0	0.00	0.53
16300	GRADER/SORTING CHAIN	1	<90.0	<90.0	0.00	0.21
20100	LUMBER CARRIER OPER	1	<90.0	<90.0	0.00	0.0
20200	FORKLIFT OPERATOR	5	<90.0	<90.0	0.00	0.64
26500	LABORER	1	<90.0	<90.0	0.00	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242   PLANT NO. = 5   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
168	PLANER SET-UP MAN	1	105.1	105.1	22	22
148	TRIMMER OPERATOR	2	94.2	95.5	18	21
176	DRY CHAIN PULLER	4	87.9	87.9	16	16
211	MILLWRIGHT/GENERAL	2	93.2	93.2	16	16
134	EDGER OPERATOR	1	100.6	100.6	16	16
173	GRADER/PLANER MILL	2	93.0	93.0	16	16
138	HOG OPERATOR	1	99.0	99.0	14	14
167	PLANER OPERATOR	1	95.9	97.3	10	12
202	FORKLIFT OPERATOR	5	84.1	88.1	10	21
144	LUMBER DIVERTER	1	95.4	97.2	10	12
137	CHIPPER OPERATOR	1	94.9	100.9	9	16
162	UNSTACKER PULLER	3	86.0	89.8	9	14
228	ELECTRICIANS	1	92.7	92.7	7	7
151	GREEN CHAIN PULLER	4	83.5	85.2	7	10
140	RESAW OPERATOR	1	91.4	91.4	6	6
182	TALLYMEN	1	90.9	90.9	6	6
114	DEBARKER OPERATOR	1	90.4	90.4	5	5
155	STICKERMAN-GREEN	1	89.1	89.7	4	5
154	STACKER-GREEN	1	89.0	94.7	4	9
261	CLEAN-UP MAN/REGULAR	1	86.4	86.4	3	3
161	UNSTACKER-DRY	1	86.0	88.8	3	4
163	GRADER/SORTING CHAIN	1	85.5	85.9	2	2
160	KILN OPERATOR	1	82.0	89.6	1	5
265	LABORER	1	81.8	81.8	1	1
201	LUMBER CARRIER OPER	1	78.4	78.4	0	0
123	SAWYER	1	75.7	75.7	0	0
127	TAIL SAWYER	1	75.7	75.7	0	0
111	LOG CARRIER OPER	1	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                                    BBN JOB NO.    9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                      EPA CRITERIA

SIC CODE =  242                 PLANT NO. =  5                  NO DATES SPECIFIEL




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TOTAL NUMBER OF PERSONNEL                                            43
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                       42
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                       42
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                       16
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                       17
LEVEL WEIGHTED POPULATION (MEAN)                                   227.9
LEVEL WEIGHTED POPULATION (W.C.)                                   271.6

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ENVIRONMENTAL PROTECTION AGENCY
                                                            BBN JOB NO.   9635
                    PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                         THRESHOLD LEVEL           = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL    = 90.0 DBA
                         EXCHANGE RATE             = 5 DBA

SIC CODE =  242              PLANT NO. =  5              NO DATES SPECIFIED

  JOB      JOB DESCRIPTION        NO. OF    SOUND  LEVEL     DAILY NOISE DOSE
 CODE                             PERS.     MEAN    W.C.      MEAN     W.C.

  168     PLANER SET-UP MAN         1      101.5   101.5      4.95     4.95
  134     EDGER OPERATOR            1      100.5   100.5      4.31     4.31
  138     HOG OPERATOR              1       97.0    97.0      2.64     2.64
  167     PLANER OPERATOR           1       95.8    97.2      2.25     2.72
  144     LUMBER DIVERTER           1       95.4    97.2      2.11     2.70
  148     TRIMMER OPERATOR          2       94.2    95.6      1.80     2.17
  173     GRADER/PLANER MILL        2       93.0    93.0      1.52     1.52
  137     CHIPPER OPERATOR          1       92.5    98.9      1.41     3.42
  182     TALLYMEN                  1       90.9    90.9      1.14     1.14
  140     RESAW OPERATOR            1       90.8    90.8      1.12     1.12
  211     MILLWRIGHT/GENERAL        2       90.7    90.7      1.11     1.11
  228     ELECTRICIANS              1       90.7    90.7      1.11     1.11
  114     DEBARKER OPERATOR         1      <90.0   <90.0      0.39     0.39
  261     CLEAN-UP MAN/REGULAR      1      <90.0   <90.0      0.26     0.26
  176     DRY CHAIN PULLER          4      <90.0   <90.0      0.22     0.22
  111     LOG CARRIER OPER          1      <90.0   <90.0      0.00     0.0
  123     SAWYER                    1      <90.0   <90.0      0.00     0.0
  127     TAIL SAWYER               1      <90.0   <90.0      0.00     0.0
  151     GREEN CHAIN PULLER        4      <90.0   <90.0      0.00     0.0
  154     STACKER-GREEN             1      <90.0    94.7      0.00     1.91
  155     STICKERMAN-GREEN          1      <90.0   <90.0      0.00     0.77
  160     KILN OPERATOR             1      <90.0   <90.0      0.00     0.87
  161     UNSTACKER-DRY             1      <90.0   <90.0      0.00     0.53
  162     UNSTACKER PULLER          3      <90.0   <90.0      0.00     0.53
  163     GRADER/SORTING CHAIN      1      <90.0   <90.0      0.00     0.21
  201     LUMBER CARRIER OPER       1      <90.0   <90.0      0.00     0.0
  202     FORKLIFT OPERATOR         5      <90.0   <90.0      0.00     0.64
  265     LABORER                   1      <90.0   <90.0      0.00     0.0
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ENVIRONMENTAL PROTECTION AGENCY
                                                                 BBN JOB NO.   9635
                         PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                             THRESHOLD LEVEL          = 90.0 DBA
                             8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                             EXCHANGE RATE            = 5 DBA

SIC CODE =  242                      PLANT NO. =  5                NO DATES SPECIFIED




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                          TOTAL NUMBER OF PERSONNEL          =       43
                          TOTAL NUMBER OVEREXPOSED (MEAN) =       15
                          TOTAL NUMBER OVEREXPOSED (H.C.) =       16

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1802	FORKLIFT	2	86.5	90.0	8	5.2	0.123
1682	GREEN CHAIN CONVY	4	83.5	85.2	5	4.5	0.107
1636	EDGER	1	101.0	101.0	13	3.8	0.090
1692	KILN CHAIN CONVYR	2	88.5	92.0	7	3.5	0.082
1623	HEADRIG	1	76.0	76.0	14	2.8	0.067
1742	DRY CHAIN CONVEYR	1	86.9	86.9	4	2.5	0.060
1740	BACK/DRY CHAIN	1	82.8	82.8	6	2.2	0.052
1716	PLANER/ENCL	1	93.0	93.0	2	2.0	0.048
1690	KILN CHAIN CONVYR	2	89.0	94.7	4	1.8	0.042
1647	RESAW-LARGE	1	92.0	92.0	7	1.7	0.042
1665	BACK/TRIMMER	1	90.6	90.6	5	1.7	0.040
1702	PLANER	1	112.0	112.0	6	1.6	0.039
1670	TRIMMER	2	93.5	94.2	10	1.2	0.028
1687	BACK. ONLY CONTR.	0	83.0	90.6	1	1.0	0.024
1790	HOG	1	102.0	102.0	1	1.0	0.024
1711	PLANER/ENCL	2	96.0	97.4	1	1.0	0.023
1784	CHIPPER	2	97.5	103.9	1	0.9	0.022
1695	KILN CHAIN CONVYR	1	91.0	91.0	1	0.8	0.019
1619	CUT-OFF SAW	1	95.0	95.0	5	0.5	0.012
1603	DEBARKER	1	88.0	88.0	1	0.4	0.010
1691	KILN CHAIN CONVYR	2	87.5	93.9	1	0.2	0.004
1622	HEADRIG	1	73.0	73.0	2	0.2	0.004
1713	BACK. ONLY CONTR.	0	85.0	85.0	2	0.2	0.004
1669	TRIMMER	2	92.0	94.8	2	0.1	0.003
1618	CUT-OFF SAW	1	94.0	94.0	1	0.1	0.003
1783	CHIPPER	2	87.0	89.8	4	0.1	0.003
1646	RESAW-LARGE	1	85.0	85.0	1	0.0	0.001
1635	EDGER	1	94.0	94.0	1	0.0	0.001
1710	PLANER/ENCL	1	92.0	92.0	1	0.0	0.000
1681	BACK. ONLY CONTR.	0	79.0	79.0	1	0.0	0.000

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242

PLANT NO. = 5

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN Ld	W.C. Ld	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1602	DEBARKER	1	86.0	86.0	1	0.0	0.000

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ENVIRONMENTAL PROTECTION AGENCY
                                                               BBN JOB NO.   9635
                        EQUIPMENT NOISE CONTROL PRIORITY

                        THRESHOLD LEVEL            = 90.0 DBA
                        8-HR PERMISSIBLE LEVEL = 90.0 DBA
                        EXCHANGE RATE              = 5 DBA

SIC CODE =  242                PLANT NO. =  5                NO DATES SPECIFIED

EQUIP.       EQUIPMENT            NO.OF     MEAN     W.C.    NO.OF   PRIORITY   NORM.
CODE        DESCRIPTION           UNITS      LJ       LJ     PERS.    INDEX      P.I.
 1636    EDGER
 1716    PLANER/ENCL                 1     101.0    101.0     10        3.8    0.255
 1647    RESAW-LARGE                 1      93.0     93.0      2        2.0    0.133
 1670    TRIMMER                     1      92.0     92.0      4        1.7    0.114
 1623    HEADRIG                     2      93.5     94.2      7        1.2    0.078
 1784    CHIPPER                     1      76.0     76.0      9        1.0    0.068
 1790    HOG                         2      97.5    103.9      1        1.0    0.067
 1702    PLANER                      1     102.0    102.0      1        1.0    0.067
 1711    PLANER/ENCL                 1     112.0    112.0      2        1.0    0.065
 1695    KILN CHAIN CONVYR           2      96.0     97.4      1        1.0    0.065
 1665    BACK/TRIMMER                1      91.0     91.0      1        0.8    0.054
 1669    TRIMMER                     1      90.6     90.6      1        0.2    0.013
 1619    CUT-OFF SAW                 2      92.0     94.8      2        0.1    0.010
 1635    EDGER                       1      95.0     95.0      4        0.1    0.005
 1710    PLANER/ENCL                 1      94.0     94.0      1        0.0    0.003
 1713    BACK. ONLY CONTR.           1      92.0     92.0      1        0.0    0.002
                                     0      85.0     85.0      1        0.0    0.002
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242

PLANT NO. = 5

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	M.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1688	KILN CHAIN	12	87.2	92.0	13	6.2	0.148
1800	FORKLIFT	2	86.5	90.0	8	5.2	0.123
1699	PLANER	5	97.6	99.8	12	4.8	0.114
1739	DRY CHAIN	2	84.8	84.8	10	4.7	0.112
1679	GREEN CHAIN	6	87.5	90.2	6	4.5	0.108
1629	EDGER	2	97.5	97.5	14	3.8	0.090
1620	HEADRIG	4	87.5	87.5	16	3.0	0.071
1664	TRIMMER	5	92.3	94.4	17	3.0	0.071
1644	RESAW/LARGE	2	88.5	88.5	8	1.8	0.042
1779	CHIPPER	4	92.3	97.2	5	1.0	0.024
1785	HOG	2	102.0	102.0	1	1.0	0.024
1810	LUMBER CARRIER	1	83.0	83.0	1	1.0	0.024
1685	KILN	0	0.0	-53.0	1	1.0	[illegible]
1610	CUT-OFF	2	94.5	94.5	6	0.6	0.015
1600	DEBARKER	2	87.0	87.0	2	0.5	0.011

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ENVIRONMENTAL PROTECTION AGENCY
                                                        BBN JOB NO.   9635

                 EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                      THRESHOLD LEVEL          = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE            = 5 DBA

SIC CODE =  242               PLANT NO. =  5            NO DATES SPECIFIED

EQUIP.       EQUIPMENT          NO.OF    MEAN     W.C.   NO.OF   PRIORITY  NORM.
 CODE       DESCRIPTION         UNITS     LJ       LJ    PERS.    INDEX    P.I.

 1699     PLANER
 1629     EDGER                   5      97.8     99.8     7        4.0   0.267
 1644     RESAW/LARGE             2      97.5     97.5    11        3.9   0.258
 1664     TRIMMER                 2      88.5     88.5     5        1.7   0.114
 1620     HEADRIG                 5      92.3     94.4    10        1.5   0.101
 1785     HOG                     4      87.5     87.5     9        1.0   0.068
 1779     CHIPPER                 2     102.0    102.0     1        1.0   0.067
 1688     KILN CHAIN              4      92.3     97.2     2        1.0   0.067
 1610     CUT-OFF                12      87.2     92.0     1        0.8   0.054
                                  2      94.5     94.5     4        0.1   0.005
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Plant No. 6

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
21100	MILLWRIGHT/GENERAL	4	94.9	94.9	39	39
12700	TAIL SAWYER	2	100.8	100.8	33	33
16800	PLANER SET-UP MAN	2	100.0	100.0	31	31
16700	PLANER OPERATOR	4	92.2	95.7	29	42
13700	CHIPPER OPERATOR	2	98.6	103.3	27	40
17300	GRADER/PLANER MILL	4	91.5	92.2	27	29
24500	OILER	2	94.9	94.9	19	19
26501	LABORER	2	94.6	94.6	19	19
26601	HELPER	2	94.6	94.6	19	19
22800	ELECTRICIANS	2	94.5	94.5	18	18
20200	FORKLIFT OPERATOR	7	85.0	85.0	17	17
13800	HOG OPERATOR	2	92.8	92.8	15	15
14800	TRIMMER OPERATOR	4	87.4	93.4	15	33
16100	UNSTACKER-DRY	2	90.0	97.1	11	24
16300	GRADER/SORTING CHAIN	2	90.0	97.1	11	24
17900	BANDER OPERATOR	2	89.3	94.6	10	19
23300	CARPENTERS	1	94.5	94.5	9	9
26602	HELPER	1	94.5	94.5	9	9
15500	STICKERMAN-GREEN	2	85.1	93.8	5	17
18201	TALLYMEN	2	85.0	85.0	4	4
14500	GREEN CHAIN OPERATOR	2	85.0	85.0	4	4
15400	STACKER-GREEN	2	84.7	91.2	4	13
16000	KILN OPERATOR	2	83.9	83.9	3	3
12300	SAWYER	2	83.9	83.9	3	3
16200	UNSTACKER PULLER	6	80.0	82.8	3	9
17600	DRY CHAIN PULLER	6	80.0	82.8	3	9
24400	FILERS	3	81.0	82.4	2	4
13400	EDGER OPERATOR	2	81.6	81.6	2	2
13100	GANG SAW OPERATOR	2	78.8	78.8	0	0
21900	MACHINISTS	1	79.0	79.0	0	0
11400	DEBARKER OPERATOR	2	77.4	77.4	0	0
18200	TALLYMEN	3	<75.0	<75.0	0	0
21700	WELDER	1	<75.0	<75.0	0	0
26500	LABORER	2	<75.0	<75.0	0	0
26600	HELPER	1	<75.0	<75.0	0	0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
12700	TAIL SAWYER	2	100.8	100.8	4.47	4.47
13700	CHIPPER OPERATOR	2	98.0	102.4	3.03	5.57
21100	MILLWRIGHT/GENERAL	4	94.4	94.4	1.84	1.84
24500	OILER	2	94.4	94.4	1.84	1.84
22800	ELECTRICIANS	2	93.4	93.4	1.61	1.61
23300	CARPENTERS	1	93.4	93.4	1.61	1.61
26501	LABORER	2	93.4	93.4	1.61	1.61
26601	HELPER	2	93.4	93.4	1.61	1.61
26602	HELPER	1	93.4	93.4	1.61	1.61
13800	HOG OPERATOR	2	92.7	92.7	1.44	1.44
16700	PLANER OPERATOR	4	92.1	95.5	1.33	2.14
17300	GRADER/PLANER MILL	4	91.5	92.2	1.23	1.36
16800	PLANER SET-UP MAN	2	91.4	91.4	1.21	1.21
17900	BANDER OPERATOR	2	<90.0	91.1	0.58	1.16
11400	DEBARKER OPERATOR	2	<90.0	<90.0	0.00	0.0
12300	SAWYER	2	<90.0	<90.0	0.00	0.0
13100	GANG SAW OPERATOR	2	<90.0	<90.0	0.00	0.0
13400	EDGER OPERATOR	2	<90.0	<90.0	0.00	0.0
14500	GREEN CHAIN OPERATOR	2	<90.0	<90.0	0.00	0.0
14800	TRIMMER OPERATOR	4	<90.0	92.9	0.00	1.50
15400	STACKER-GREEN	2	<90.0	90.5	0.00	1.07
15500	STICKERMAN-GREEN	2	<90.0	93.1	0.00	1.53
16000	KILN OPERATOR	2	<90.0	<90.0	0.00	0.0
16100	UNSTACKER-DRY	2	<90.0	97.1	0.00	2.67
16200	UNSTACKER PULLER	6	<90.0	<90.0	0.00	0.0
16300	GRADER/SORTING CHAIN	2	<90.0	97.1	0.00	2.67
17600	DRY CHAIN PULLER	6	<90.0	<90.0	0.00	0.0
18200	TALLYMEN	3	<90.0	<90.0	0.00	0.0
18201	TALLYMEN	2	<90.0	<90.0	0.00	0.0
20200	FORKLIFT OPERATOR	7	<90.0	<90.0	0.00	0.0
21700	WELDER	1	<90.0	<90.0	0.00	0.0
21900	MACHINISTS	1	<90.0	<90.0	0.00	0.0
24400	FILERS	3	<90.0	<90.0	0.00	0.0
26500	LABORER	2	<90.0	<90.0	0.00	0.0
26600	HELPER	1	<90.0	<90.0	0.00	0.0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
211	MILLWRIGHT/GENERAL	4	94.9	94.9	39	39
127	TAIL SAWYER	2	100.8	100.8	33	33
168	PLANER SET-UP MAN	2	100.0	100.0	31	31
167	PLANER OPERATOR	4	92.2	95.7	29	42
266	HELPER	4	87.1	87.1	28	28
137	CHIPPER OPERATOR	2	98.6	103.3	27	40
173	GRADER/PLANER MILL	4	91.5	92.2	27	29
245	OILER	2	94.9	94.9	19	19
265	LABORER	4	79.8	79.8	19	19
228	ELECTRICIANS	2	94.5	94.5	18	18
202	FORKLIFT OPERATOR	7	85.0	85.0	17	17
138	HOG OPERATOR	2	92.8	92.8	15	15
148	TRIMMER OPERATOR	4	87.4	93.4	15	33
161	UNSTACKER-DRY	2	90.0	97.1	11	24
163	GRADER/SORTING CHAIN	2	90.0	97.1	11	24
179	BANDER OPERATOR	2	89.3	94.6	10	19
233	CARPENTERS	1	94.5	94.5	9	9
155	STICKERMAN-GREEN	2	85.1	93.8	5	17
182	TALLYMEN	5	<75.0	<75.0	4	4
145	GREEN CHAIN OPERATOR	2	85.0	85.0	4	4
154	STACKER-GREEN	2	84.7	91.2	4	13
160	KILN OPERATOR	2	83.9	83.9	3	3
123	SAWYER	2	83.9	83.9	3	3
162	UNSTACKER PULLER	6	80.0	82.8	3	9
176	DRY CHAIN PULLER	6	80.0	82.8	3	9
244	FILERS	3	81.0	82.4	2	4
134	EDGER OPERATOR	2	81.6	81.6	2	2
131	GANG SAW OPERATOR	2	78.8	78.8	0	0
219	MACHINISTS	1	79.0	79.0	0	0
114	DEBARKER OPERATOR	2	77.4	77.4	0	0
217	WELDER	1	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY
                                                                BBN JOB NO.   9635
                         PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                          EPA CRITERIA

SIC CODE =  242                     PLANT NO. =  5                NO DATES SPECIFIED



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TOTAL NUMBER OF PERSONNEL                                          88
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                     81
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                     81
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                     30
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                     44
LEVEL WEIGHTED POPULATION (MEAN)                                  407.5
LEVEL WEIGHTED POPULATION (W.C.)                                  522.4

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
127	TAIL SAWYER	2	100.8	100.8	4.47	4.47
137	CHIPPER OPERATOR	2	98.0	102.4	3.03	5.57
211	MILLWRIGHT/GENERAL	4	94.4	94.4	1.84	1.84
245	OILER	2	94.4	94.4	1.84	1.84
228	ELECTRICIANS	2	93.4	93.4	1.61	1.61
233	CARPENTERS	1	93.4	93.4	1.61	1.61
138	HOG OPERATOR	2	92.7	92.7	1.44	1.44
167	PLANER OPERATOR	4	92.1	95.5	1.33	2.14
173	GRADER/PLANER MILL	4	91.5	92.2	1.23	1.36
168	PLANER SET-UP MAN	2	91.4	91.4	1.21	1.21
266	HELPER	4	91.4	91.4	1.21	1.21
265	LABORER	4	<90.0	<90.0	0.81	0.81
179	BANDER OPERATOR	2	<90.0	91.1	0.58	1.16
114	DEBARKER OPERATOR	2	<90.0	<90.0	0.00	0.0
123	SAWYER	2	<90.0	<90.0	0.00	0.0
131	GANG SAW OPERATOR	2	<90.0	<90.0	0.00	0.0
134	EDGER OPERATOR	2	<90.0	<90.0	0.00	0.0
145	GREEN CHAIN OPERATOR	2	<90.0	<90.0	0.00	0.0
148	TRIMMER OPERATOR	4	<90.0	92.9	0.00	1.50
154	STACKER-GREEN	2	<90.0	90.5	0.00	1.07
155	STICKERMAN-GREEN	2	<90.0	93.1	0.00	1.53
160	KILN OPERATOR	2	<90.0	<90.0	0.00	0.0
161	UNSTACKER-DRY	2	<90.0	97.1	0.00	2.67
162	UNSTACKER PULLER	6	<90.0	<90.0	0.00	0.0
163	GRADER/SORTING CHAIN	2	<90.0	97.1	0.00	2.67
176	DRY CHAIN PULLER	6	<90.0	<90.0	0.00	0.0
182	TALLYMEN	5	<90.0	<90.0	0.00	0.0
202	FORKLIFT OPERATOR	7	<90.0	<90.0	0.00	0.0
217	WELDER	1	<90.0	<90.0	0.00	0.0
219	MACHINISTS	1	<90.0	<90.0	0.00	0.0
244	FILERS	3	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                BBN JOB NO.   9635

                 PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242                PLANT NO. =  5              NO DATES SPECIFIED




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                      TOTAL NUMBER OF PERSONNEL          =      68
                      TOTAL NUMBER OVEREXPOSED (MEAN) =      30
                      TOTAL NUMBER OVEREXPOSED (W.C.) =      44

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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242

PLANT NO. = 5

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1693	KILN CHAIN CONVYR	2	80.0	82.8	14	12.0	0.148
1831	GANG SAW	1	79.0	79.0	39	9.3	0.115
1802	FORKLIFT	2	85.0	85.0	9	8.8	0.109
1670	TRIMMER	2	87.5	93.9	46	6.9	0.085
1702	PLANER	1	113.0	113.0	31	4.7	0.058
1711	PLANER/ENCL	2	92.5	96.0	20	4.2	0.052
1623	HEADRIG	1	84.0	84.0	25	4.1	0.051
1692	KILN CHAIN CONVYR	2	90.0	97.1	6	4.0	0.049
1716	PLANER/ENCL	2	91.5	92.2	4	4.0	0.049
1638	EDGER	1	82.0	82.0	17	3.1	0.038
1695	KILN CHAIN CONVYR	1	85.0	85.0	2	2.0	0.025
1682	GREEN CHAIN CONVY	1	86.5	86.5	2	2.0	0.025
1627	HEADRIG	1	101.0	101.0	2	2.0	0.024
1784	CHIPPER	2	100.5	105.4	2	1.9	0.023
1691	KILN CHAIN CONVYR	2	85.5	94.7	2	1.7	0.022
1690	KILN CHAIN CONVYR	2	85.0	92.1	2	1.7	0.021
1603	DEBARKER	1	78.0	78.0	2	1.7	0.021
1658	RESAW-LARGE	1	74.0	74.0	14	1.5	0.019
1788	HOG/ENCL	1	94.0	94.0	2	1.3	0.016
1787	HOG/ENCL	1	91.0	91.0	2	0.7	0.008
1680	BACK/GREEN CHAIN	1	83.1	83.1	4	0.5	0.007
1669	TRIMMER	2	86.5	91.4	4	0.4	0.005
1686	BACK/KILN&CNTL RM	1	83.7	83.7	2	0.2	0.002
1752	STACK BANDER	1	83.0	83.0	2	0.2	0.002
1617	CUT-OFF SAW	1	80.0	80.0	2	0.2	0.002
1710	PLANER/ENCL	1	91.3	91.3	4	0.2	0.002
1783	CHIPPER	2	91.0	92.4	2	0.1	0.002
1602	DEBARKER	1	75.0	75.0	2	0.1	0.001
1637	EDGER	1	75.0	75.0	2	0.0	0.001
1622	HEADRIG	1	80.0	80.0	2	0.0	0.001

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                                 EQUIPMENT NOISE IMPACT

                                      EPA CRITERIA

SIC CODE =  242                 PLANT NO. =  5                 NO DATES SPECIFIED

EQUIP.        EQUIPMENT           NO.OF    MEAN     W.C.     NO.OF   PRIORITY  NORM.
 CODE        DESCRIPTION          UNITS     LJ       LJ      PERS.    INDEX     P.I.

 1830     GANG SAW                   1     74.0     74.0       2        0.0    0.000
 1626     HEADRIG                    1     95.0     95.0       2        0.0    0.000
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ENVIRONMENTAL PROTECTION AGENCY                                      BBN JOB NO.   9635

                        EQUIPMENT NOISE CONTROL PRIORITY

                        THRESHOLD LEVEL          = 90.0 DBA
                        8-HR PERMISSIBLE LEVEL   = 90.0 DBA
                        EXCHANGE RATE            = 5 DBA

SIC CODE =  242                PLANT NO. =  5               NO DATES SPECIFIED

EQUIP.       EQUIPMENT            NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
CODE        DESCRIPTION           UNITS     LJ       LJ     PERS.    INDEX     P.I.

 1831     GANG SAW                  1      79.0     79.0      28       5.1     0.169
 1711     PLANER/ENCL               2      92.5     96.0      18       4.1     0.137
 1716     PLANER/ENCL               2      91.5     92.2       4       4.0     0.133
 1702     PLANER                    1     113.0    113.0      22       2.9     0.096
 1670     TRIMMER                   2      87.5     93.9      34       2.7     0.089
 1623     HEADRIG                   1      84.0     84.0      14       2.0     0.066
 1627     HEADRIG                   1     101.0    101.0       2       2.0     0.065
 1784     CHIPPER                   2     100.5    105.4       2       1.7     0.057
 1788     HOG/ENCL                  1      94.0     94.0       2       1.2     0.040
 1658     RESAW-LARGE               1      74.0     74.0      14       1.1     0.038
 1638     EDGER                     1      82.0     82.0      14       1.1     0.036
 1787     HOG/ENCL                  1      91.0     91.0       2       0.8     0.027
 1783     CHIPPER                   2      91.0     92.4       2       0.3     0.010
 1710     PLANER/ENCL               1      91.3     91.3       4       0.2     0.006
 1626     HEADRIG                   1      95.0     95.0       2       0.0     0.001
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1688	KILN CHAIN	10	85.1	92.0	26	21.5	0.265
1699	PLANER	6	95.4	97.9	59	13.0	0.161
1828	GANG SAW	2	76.5	76.5	41	9.4	0.116
1800	FORKLIFT	2	85.0	85.0	9	8.8	0.109
1664	TRIMMER	4	87.0	92.7	50	7.3	0.090
1620	HEADRIG	4	90.0	90.0	31	6.1	0.076
1629	EDGER	2	76.5	76.5	19	3.2	0.039
1679	GREEN CHAIN	2	84.8	84.8	6	2.5	0.031
1785	HOG	2	92.5	92.5	4	2.0	0.025
1779	CHIPPER	4	95.8	99.4	4	2.0	0.025
1600	DEBARKER	2	76.5	76.5	4	1.8	0.022
1644	RESAW/LARGE	2	74.0	74.0	14	1.5	0[illegible]19
1776	CONVEYOR/GEN	3	87.0	91.0	19	1.3	0.015
1685	KILN	2	81.8	81.8	2	0.2	0.002
1749	STACK SANDER	2	83.0	83.0	2	0.2	0.002
1610	CUT-OFF	2	79.5	79.5	2	0.2	0.002

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1699	PLANER	6	95.4	97.9	48	11.2	0.372
1828	GANG SAW	2	76.5	76.5	28	5.1	0.169
1620	HEADRIG	4	90.0	90.0	18	4.0	0.133
1664	TRIMMER	4	87.0	92.7	34	2.7	0.089
1785	HOG	2	92.5	92.5	4	2.0	0.067
1779	CHIPPER	4	95.8	99.4	4	2.0	0.067
1644	RESAW/LARGE	2	74.0	74.0	14	1.1	0.038
1629	EDGER	2	78.5	78.5	14	1.1	0.036
1776	CONVEYOR/GEN	3	87.0	91.0	14	0.9	0.029

Plant No. 7

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	LEV. WT. POP. MEAN	LEV. WT. POP. W.C.
21100	MILLWRIGHT/GENERAL	40	89.9	89.9	222	222
22800	ELECTRICIANS	30	89.9	89.9	166	166
15900	TRANSFER OPERATOR	3	100.5	100.5	48	48
16800	PLANER SET-UP MAN	2	103.7	104.4	41	43
13400	EDGER OPERATOR	4	94.9	94.9	39	39
17601	DRY CHAIN PULLER	10	86.4	88.5	32	45
13801	HOG OPERATOR	2	97.9	97.9	26	26
17600	DRY CHAIN PULLER	8	86.0	85.0	24	24
20100	LUMBER CARRIER OPER	7	86.5	86.5	22	22
17300	GRADER/PLANER MILL	9	85.0	85.0	22	22
16700	PLANER OPERATOR	2	94.4	97.7	18	25
20200	FORKLIFT OPERATOR	7	85.1	85.1	17	17
14300	UNSCRAMBLE OPERATOR	2	91.3	94.8	13	19
14000	RESAW OPERATOR	2	90.6	90.6	12	12
26600	HELPER	6	83.6	83.6	11	11
18200	TALLYMEN	4	85.0	85.0	9	9
12000	CUT-OFF SAW OPERATOR	2	88.3	88.3	8	8
13800	HOG OPERATOR	1	92.8	92.8	7	7
15400	STACKER-GREEN	4	83.8	83.8	7	7
19000	SPECIALTY RESAW OPER	1	92.0	92.0	7	7
19100	SPECIALTY RESAW OFFB	1	92.0	92.0	7	7
15500	STICKERMAN-GREEN	4	83.0	83.0	6	6
12300	SAWYER	4	82.4	83.7	5	7
21900	MACHINISTS	8	<75.0	<75.0	0	0
14800	TRIMMER OPERATOR	4	<75.0	84.4	0	8
11400	DEBARKER OPERATOR	2	<75.0	<75.0	0	0
22300	MECHANICS	10	<75.0	<75.0	0	0

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
15900	TRANSFER OPERATOR	3	99.4	99.4	3.69	3.69
16800	PLANER SET-UP MAN	2	97.5	98.0	2.81	3.01
13801	HOG OPERATOR	2	94.9	94.9	1.97	1.97
16700	PLANER OPERATOR	2	94.4	97.7	1.83	2.91
13400	EDGER OPERATOR	4	94.3	94.3	1.82	1.82
19000	SPECIALTY RESAW OPER	1	91.4	91.4	1.22	1.22
19100	SPECIALTY RESAW OFFB	1	91.4	91.4	1.22	1.22
14300	UNSCRAMBLE OPERATOR	2	90.9	94.4	1.22	1.22
13800	HOG OPERATOR	1	90.9	90.9	1.13	1.65
14000	RESAW OPERATOR	2	<90.0	<90.0	1.13	1.13
21100	MILLWRIGHT/GENERAL	40	<90.0	<90.0	0.98	0.98
22800	ELECTRICIANS	30	<90.0	<90.0	0.74	0.74
12000	CUT-OFF SAW OPERATOR	2	<90.0	<90.0	0.74	0.74
11400	DEBARKER OPERATOR	2	<90.0	<90.0	0.26	0.25
12300	SAWYER	4	<90.0	<90.0	0.00	0.0
14800	TRIMMER OPERATOR	4	<90.0	<90.0	0.00	0.0
15400	STACKER-GREEN	4	<90.0	<90.0	0.00	0.18
15500	STICKERMAN-GREEN	4	<90.0	<90.0	0.00	0.0
17300	GRADER/PLANER MILL	9	<90.0	<90.0	0.00	0.0
17600	DRY CHAIN PULLER	8	<90.0	<90.0	0.00	0.0
17601	DRY CHAIN PULLER	10	<90.0	<90.0	0.00	0.0
18200	TALLYMEN	4	<90.0	<90.0	0.00	0.0
20100	LUMBER CARRIER OPER	7	<90.0	<90.0	0.00	0.0
20200	FORKLIFT OPERATOR	7	<90.0	<90.0	0.00	0.0
21900	MACHINISTS	8	<90.0	<90.0	0.00	0.0
22300	MECHANICS	10	<90.0	<90.0	0.00	0.0
26600	HELPER	6	<90.0	<90.0	0.00	0.0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	LEV. WT. POP. MEAN	LEV. WT. POP. W.C.
211	MILLWRIGHT/GENERAL	40	89.9	89.9	222	222
228	ELECTRICIANS	30	89.9	89.9	166	166
176	DRY CHAIN PULLER	18	86.2	87.4	56	69
159	TRANSFER OPERATOR	3	100.5	100.5	48	48
168	PLANER SET-UP MAN	2	103.7	104.4	41	43
134	EDGER OPERATOR	4	94.9	94.9	39	39
138	HOG OPERATOR	3	96.2	96.2	34	34
201	LUMBER CARRIER OPER	7	86.5	86.5	22	22
173	GRADER/PLANER MILL	9	85.0	85.0	22	22
167	PLANER OPERATOR	2	94.4	97.7	18	25
202	FORKLIFT OPERATOR	7	85.1	85.1	17	17
143	UNSCRAMBLE OPERATOR	2	91.3	94.8	13	19
140	RESAW OPERATOR	2	90.6	90.6	12	12
266	HELPER	6	83.6	83.6	11	11
182	TALLYMEN	4	85.0	85.0	9	9
120	CUT-OFF SAW OPERATOR	2	88.3	88.3	8	8
154	STACKER-GREEN	4	83.8	83.8	7	7
190	SPECIALTY RESAW OPER	1	92.0	92.0	7	7
191	SPECIALTY RESAW OFFB	1	92.0	92.0	7	7
155	STICKERMAN-GREEN	4	83.0	83.0	6	6
123	SAWYER	4	82.4	83.7	5	7
219	MACHINISTS	8	<75.0	<75.0	0	0
148	TRIMMER OPERATOR	4	<75.0	84.4	0	8
114	DEBARKER OPERATOR	2	<75.0	<75.0	0	0
223	MECHANICS	10	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635
                PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES
                                 EPA CRITERIA
SIC CODE =  242                 PLANT NO. =  7           NO DATES SPECIFIED



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TOTAL NUMBER OF PERSONNEL                                      179
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                 155
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                 159
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                  20
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                  20
LEVEL WEIGHTED POPULATION (MEAN)                               780.8
LEVEL WEIGHTED POPULATION (W.C.)                               820.0
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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                        THRESHOLD LEVEL          = 90.0 DBA
                        8-HR PERMISSIBLE LEVEL   = 90.0 DBA
                        EXCHANGE RATE            = 5 DBA

SIC CODE =  242                 PLANT NO. =  7             NO DATES SPECIFIED

 JOB      JOB DESCRIPTION            NO. OF     SOUND LEVEL       DAILY NOISE DOSE
CODE                                 PERS.      MEAN     W.C.      MEAN     W.C.

 159     TRANSFER OPERATOR              3       99.4     99.4      3.69      3.69
 168     PLANER SET-UP MAN              2       97.5     98.0      2.81      3.01
 167     PLANER OPERATOR                2       94.4     97.7      1.83      2.91
 134     EDGER OPERATOR                 4       94.3     94.3      1.82      1.82
 138     HOG OPERATOR                   3       93.8     93.8      1.69      1.69
 190     SPECIALTY RESAW OPER           1       91.4     91.4      1.22      1.22
 191     SPECIALTY RESAW OFFB           1       91.4     91.4      1.22      1.22
 143     UNSCRAMBLE OPERATOR            2       90.9     94.4      1.13      1.85
 140     RESAW OPERATOR                 2      <90.0    <90.0      0.98      0.98
 211     MILLWRIGHT/GENERAL            40      <90.0    <90.0      0.74      0.74
 228     ELECTRICIANS                  30      <90.0    <90.0      0.74      0.74
 120     CUT-OFF SAW OPERATOR           2      <90.0    <90.0      0.26      0.26
 114     DEBARKER OPERATOR              2      <90.0    <90.0      0.00      0.0
 123     SAWYER                         4      <90.0    <90.0      0.00      0.0
 148     TRIMMER OPERATOR               4      <90.0    <90.0      0.00      0.18
 154     STACKER-GREEN                  4      <90.0    <90.0      0.00      0.0
 155     STICKERMAN-GREEN               4      <90.0    <90.0      0.00      0.0
 173     GRADER/PLANER MILL             9      <90.0    <90.0      0.00      0.0
 176     DRY CHAIN PULLER              18      <90.0    <90.0      0.00      0.0
 182     TALLYMEN                       4      <90.0    <90.0      0.00      0.0
 201     LUMBER CARRIER OPER            7      <90.0    <90.0      0.00      0.0
 202     FORKLIFT OPERATOR              7      <90.0    <90.0      0.00      0.0
 219     MACHINISTS                     8      <90.0    <90.0      0.00      0.0
 223     MECHANICS                     10      <90.0    <90.0      0.00      0.0
 266     HELPER                         6      <90.0    <90.0      0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                    BBN JOB NO.    9635

             PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                  THRESHOLD LEVEL        = 90.0 DBA
                  8-HR PERMISSIBLE LEVEL = 90.0 DBA
                  EXCHANGE RATE          = 5 DBA

SIC CODE =  242            PLANT NO. =  7             NO DATES SPECIFIED




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               TOTAL NUMBER OF PERSONNEL        =     179
               TOTAL NUMBER OVEREXPOSED (MEAN)  =      18
               TOTAL NUMBER OVEREXPOSED (W.C.)  =      18

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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1623	HEADRIG	2	83.0	84.4	80	39.9	0.258
1670	TRIMMER	1	72.0	72.0	92	18.8	0.121
1711	PLANER/ENCL	4	94.5	97.9	149	17.3	0.111
1802	FORKLIFT	1	86.6	86.6	13	13.0	0.084
1693	KILN CHAIN CONVYR	1	86.0	86.0	31	11.1	0.072
1764	RESAW-SPECIALTY	1	93.0	93.0	76	10.6	0.068
1742	DRY CHAIN CONVEYR	5	86.4	88.5	10	10.0	0.065
1636	EDGER	1	95.5	95.5	78	6.2	0.040
1815	TRANSFER CARRIER	1	102.0	102.0	3	3.0	0.019
1690	KILN CHAIN CONVYR	4	83.5	91.6	4	3.0	0.019
1691	KILN CHAIN CONVYR	4	82.3	91.8	4	2.7	0.018
1682	GREEN CHAIN CONVY	3	91.7	95.2	2	2.0	0.013
1647	RESAW-LARGE	1	91.0	91.0	5	1.9	0.013
1702	PLANER	2	116.5	117.2	2	1.9	0.012
1784	CHIPPER	1	103.1	103.1	5	1.7	0.011
1613	CUT-OFF SAW	1	97.0	97.0	2	1.5	0.009
1612	CUT-OFF SAW	1	83.0	83.0	2	0.5	0.003
1622	HEADRIG	2	79.0	80.4	4	0.4	0.002
1788	HOG/ENCL	1	96.0	96.0	1	0.3	0.002
1790	HOG	1	94.0	94.0	2	0.2	0.001
1635	EDGER	1	88.5	88.5	4	0.1	0.001
1646	RESAW-LARGE	1	87.0	87.0	2	0.1	0.001
1787	HOG/ENCL	1	91.0	91.0	1	0.1	0.001
1710	PLANER/ENCL	1	91.3	91.3	2	0.0	0.000
1680	BACK/GREEN CHAIN	1	83.1	83.1	2	0.0	0.000
1687	KILN	2	85.5	93.3	3	0.0	0.000
1816	TRANSFER CARRIER	1	76.0	76.0	3	0.0	0.000

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL   = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242                PLANT NO. =  7               NO DATES SPECIFIED

EQUIP.       EQUIPMENT          NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION         UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1636    EDGER                    1      95.5     95.5      5        4.0     0.225
 1711    PLANER/ENCL              4      94.5     97.9      7        3.0     0.167
 1815    TRANSFER CARRIER         1     102.0    102.0      3        3.0     0.167
 1682    GREEN CHAIN CONVY        3      91.7     95.2      2        2.0     0.111
 1784    CHIPPER                  1     103.1    103.1      2        1.6     0.087
 1764    RESAW-SPECIALTY          1      93.0     93.0      4        1.5     0.086
 1702    PLANER                   2     116.5    117.2      2        1.4     0.078
 1790    HOG                      1      94.0     94.0      2        0.4     0.025
 1623    HEADRIG                  2      83.0     84.4      1        0.3     0.017
 1788    HOG/ENCL                 1      96.0     96.0      1        0.3     0.017
 1670    TRIMMER                  1      72.0     72.0      1        0.2     0.[illegible]
 1787    HOG/ENCL                 1      91.0     91.0      1        0.2     0.0[illegible]
 1710    PLANER/ENCL              1      91.3     91.3      2        0.1     0.004
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1620	HEADRIG	4	81.0	82.4	84	40.3	0.260
1699	PLANER	10	97.5	100.2	153	19.2	0.124
1664	TRIMMER	5	83.8	97.9	92	18.8	0.121
1688	KILN CHAIN	11	84.7	93.6	39	16.8	0.108
1800	FORKLIFT	1	86.6	86.6	13	13.0	0.084
1759	RESAW/SPECIALTY	2	92.0	92.0	76	10.6	0.068
1739	DRY CHAIN	5	86.4	88.5	10	10.0	0.065
1810	LUMBER CARRIER	2	88.0	88.0	28	8.5	0.055
1629	EDGER	6	83.7	85.8	82	6.4	0.041
1813	TRANSFER CARRIER	2	89.0	89.0	6	3.0	0.019
1644	RESAW/LARGE	2	89.0	89.0	7	2.1	0.013
1679	GREEN CHAIN	4	89.5	93.0	4	2.0	0.013
1610	CUT-OFF	2	90.0	90.0	4	2.0	0.013
1779	CHIPPER	2	99.5	99.6	5	1.7	0.011
1785	HOG	4	92.8	92.8	4	0.6	0.004
1776	CONVEYOR/GEN	2	84.8	86.2	3	0.1	0.001
1685	KILN	2	85.5	93.3	3	0.0	0.000

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1699	PLANER	10	97.5	100.2	11	4.5	0.249
1629	EDGER	6	83.7	85.8	9	4.0	0.225
1813	TRANSFER CARRIER	2	89.0	89.0	6	3.0	0.167
1679	GREEN CHAIN	4	89.5	93.0	4	2.0	0.111
1779	CHIPPER	2	99.6	99.6	2	1.6	0.087
1759	RESAW/SPECIALTY	2	92.0	92.0	4	1.5	0.086
1785	HOG	4	92.8	92.8	4	0.9	0.050
1620	HEADRIG	4	81.0	82.4	1	0.3	0.017
1664	TRIMMER	5	83.8	97.9	1	0.2	0.009

Plant No. 8

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242

PLANT NO. = 5

NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
16800	PLANER SET-UP MAN	6	115.0	117.8	240	275
17300	GRADER/PLANER MILL	6	95.8	97.1	64	73
14800	TRIMMER OPERATOR	6	95.7	95.7	64	64
16700	PLANER OPERATOR	6	94.7	96.8	58	85
17600	DRY CHAIN PULLER	12	86.8	90.9	42	75
19100	SPECIALTY RESAW OFFB	2	96.5	97.2	23	24
15400	STACKER-GREEN	7	86.1	86.1	21	21
20200	FORKLIFT OPERATOR	7	85.8	90.0	20	39
19000	SPECIALTY RESAW OPER	1	102.0	103.4	18	20
10400	PLANER SUPERVISOR	3	89.4	92.6	15	23
18200	TALLYMEN	2	91.6	91.6	13	13
26100	CLEAN-UP MAN/REGULAR	2	89.8	93.2	10	16
17301	GRADER/PLANER MILL	1	93.0	94.4	8	9
15401	STACKER-GREEN	1	86.4	88.9	3	4
17601	DRY CHAIN PULLER	1	85.7	88.0	2	4
21300	MILLWRIGHT/PLANER	1	85.3	88.6	2	4
15500	STICKERMAN-GREEN	1	85.1	85.1	2	2
17302	GRADER/PLANER MILL	1	84.6	86.8	2	3
14300	UNSCRAMBLE OPERATOR	1	84.0	86.0	2	3
14500	GREEN CHAIN OPERATOR	1	83.3	85.1	1	2
16000	KILN OPERATOR	2	79.8	79.8	1	1
17900	BANDER OPERATOR	2	<75.0	<75.0	0	0
20100	LUMBER CARRIER OPER	1	<75.0	<75.0	0	0
21900	MACHINISTS	1	<75.0	<75.0	0	0
22300	MECHANICS	2	<75.0	<75.0	0	0
26200	CLEAN-UP MAN/DOWN TM	2	<75.0	<75.0	0	0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
16800	PLANER SET-UP MAN	6	113.3	116.0	25.25	36.89
19000	SPECIALTY RESAW OPER	1	102.0	103.4	5.28	6.42
19100	SPECIALTY RESAW OFFB	2	96.5	97.2	2.46	2.72
17300	GRADER/PLANER MILL	6	95.8	97.1	2.22	2.67
14800	TRIMMER OPERATOR	6	95.7	95.7	2.19	2.19
16700	PLANER OPERATOR	6	94.2	98.5	1.80	3.24
18200	TALLYMEN	2	91.2	91.2	1.19	1.19
17301	GRADER/PLANER MILL	1	91.0	92.4	1.15	1.40
26100	CLEAN-UP MAN/REGULAR	2	<90.0	90.5	0.65	1.07
10400	PLANER SUPERVISOR	3	<90.0	<90.0	0.58	0.93
21300	MILLWRIGHT/PLANER	1	<90.0	<90.0	0.26	0.40
14300	UNSCRAMBLE OPERATOR	1	<90.0	<90.0	0.00	0.0
14500	GREEN CHAIN OPERATOR	1	<90.0	<90.0	0.00	0.0
15400	STACKER-GREEN	7	<90.0	<90.0	0.00	0.0
15401	STACKER-GREEN	1	<90.0	<90.0	0.00	0.0
15500	STICKERMAN-GREEN	1	<90.0	<90.0	0.00	0.0
16000	KILN OPERATOR	2	<90.0	<90.0	0.00	0.0
17302	GRADER/PLANER MILL	1	<90.0	<90.0	0.00	0.0
17600	DRY CHAIN PULLER	12	<90.0	90.5	0.00	1.07
17601	DRY CHAIN PULLER	1	<90.0	<90.0	0.00	0.0
17900	BANDER OPERATOR	2	<90.0	<90.0	0.00	0.0
20100	LUMBER CARRIER OPER	1	<90.0	<90.0	0.00	0.0
20200	FORKLIFT OPERATOR	7	<90.0	<90.0	0.00	0.82
21900	MACHINISTS	1	<90.0	<90.0	0.00	0.0
22300	MECHANICS	2	<90.0	<90.0	0.00	0.0
26200	CLEAN-UP MAN/DOWN TM	2	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

             PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                              EPA CRITERIA

SIC CODE =  242               PLANT NO. =  8              NO DATES SPECIFIED

  JOB       JOB DESCRIPTION          NO. OF    SOUND   LEVEL     LEV. WT. POP.
 CODE                                PERS.      MEAN    W.C.      MEAN    W.C.

  168       PLANER SET-UP MAN           6      115.0   117.8       240     275
  173       GRADER/PLANER MILL          8       94.0    95.5        75      86
  148       TRIMMER OPERATOR            6       95.7    95.7        64      64
  167       PLANER OPERATOR             6       94.7    96.8        58      85
  176       DRY CHAIN PULLER           13       86.7    90.7        44      80
  154       STACKER-GREEN               8       86.1    85.4        24      26
  191       SPECIALTY RESAW OFFB        2       96.5    97.2        23      24
  202       FORKLIFT OPERATOR           7       85.8    90.0        20      39
  190       SPECIALTY RESAW OPER        1      102.0   103.4        16      20
  104       PLANER SUPERVISOR           3       89.4    92.6        15      23
  182       TALLYMEN                    2       91.6    91.6        13      13
  261       CLEAN-UP MAN/REGULAR        2       89.8    93.2        10      16
  213       MILLWRIGHT/PLANER           1       85.3    83.6         2       4
  155       STICKERMAN-GREEN            1       85.1    85.1         2       2
  143       UNSCRAMBLE OPERATOR         1       84.0    85.0         2       3
  145       GREEN CHAIN OPERATOR        1       83.3    85.1         1       2
  160       KILN OPERATOR               2       79.8    79.8         1       1
  179       BANDER OPERATOR             2      <75.0   <75.0         0       0
  201       LUMBER CARRIER OPER         1      <75.0   <75.0         0       0
  219       MACHINISTS                  1      <75.0   <75.0         0       0
  223       MECHANICS                   2      <75.0   <75.0         0       0
  262       CLEAN-UP MAN/DOWN TM        2      <75.0   <75.0         0       0


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TOTAL NUMBER OF PERSONNEL                                       75
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                  70
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                  70
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                  30
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                  54
LEVEL WEIGHTED POPULATION (MEAN)                               619.2
LEVEL WEIGHTED POPULATION (W.C.)                               769.0
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ENVIRONMENTAL PROTECTION AGENCY
                                                         BBN JOB NO.   9635
                   PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                      THRESHOLD LEVEL          = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE            = 5 DBA

SIC CODE =  242              PLANT NO. =  5              NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF     SOUND LEVEL     DAILY NOISE DOSE
CODE                                PERS.      MEAN    W.C.     MEAN     W.C.

 168      PLANER SET-UP MAN           6       113.3   115.0    25.25    36.89
 190      SPECIALTY RESAW OPER        1       102.0   103.4     5.28     6.42
 191      SPECIALTY RESAW OFFB        2        96.5    97.2     2.46     2.72
 148      TRIMMER OPERATOR            6        95.7    95.7     2.19     2.72
 173      GRADER/PLANER MILL          8        94.3    95.6     1.81     2.19
 167      PLANER OPERATOR             6        94.2    96.5     1.80     2.17
 182      TALLYMEN                    2        91.2    91.2     1.19     3.24
 261      CLEAN-UP MAN/REGULAR        2       <90.0    90.5     0.65     1.19
 104      PLANER SUPERVISOR           3       <90.0   <90.0     0.58     1.07
 213      MILLWRIGHT/PLANER           1       <90.0   <90.0     0.26     0.93
 143      UNSCRAMBLE OPERATOR         1       <90.0   <90.0     0.00     0.40
 145      GREEN CHAIN OPERATOR        1       <90.0   <90.0     0.00     0.0
 154      STACKER-GREEN               8       <90.0   <90.0     0.00     0.0
 155      STICKERMAN-GREEN            1       <90.0   <90.0     0.00     0.0
 160      KILN OPERATOR               2       <90.0   <90.0     0.00     0.0
 176      DRY CHAIN PULLER           13       <90.0   <90.0     0.00     0.0
 179      BANDER OPERATOR             2       <90.0   <90.0     0.00     0.99
 201      LUMBER CARRIER OPER         1       <90.0   <90.0     0.00     0.0
 202      FORKLIFT OPERATOR           7       <90.0   <90.0     0.00     0.0
 219      MACHINISTS                  1       <90.0   <90.0     0.00     0.82
 223      MECHANICS                   2       <90.0   <90.0     0.00     0.0
 262      CLEAN-UP MAN/DOWN TM        2       <90.0   <90.0     0.00     0.0




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                 TOTAL NUMBER OF PERSONNEL              =       78
                 TOTAL NUMBER OVEREXPOSED (MEAN) =       30
                 TOTAL NUMBER OVEREXPOSED (W.C.) =       44

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LD	W.C. LD	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1742	DRY CHAIN CONVEYR	2	87.0	91.2	30	11.6	0.166
1702	PLANER	2	118.0	120.8	36	9.3	0.133
1802	FORKLIFT	2	88.0	92.2	26	7.1	0.102
1716	PLANER/ENCL	2	96.0	97.4	13	6.9	0.098
1690	KILN CHAIN CONVYR	1	86.4	86.4	7	6.8	0.098
1711	PLANER/ENCL	2	95.0	99.2	18	6.6	0.095
1670	TRIMMER	1	96.0	96.0	12	6.2	0.088
1694	KILN CHAIN CONVYR	.6	86.8	89.3	36	5.2	0.075
1687	KILN	1	85.0	85.0	2	2.0	0.029
1768	RESAW-SPECIALTY	2	96.5	97.2	2	2.0	0.029
1695	KILN CHAIN CONVYR	1	92.0	92.0	2	2.0	0.028
1762	BACK. ONLY CONTR.	1	88.5	86.6	12	1.2	0.017
1764	RESAW-SPECIALTY	2	102.0	103.4	1	1.0	0.014
1691	KILN CHAIN CONVYR	1	85.4	85.4	1	1.0	0.014
1715	PLANER/ENCL	1	93.0	93.0	6	0.3	0.005
1669	TRIMMER	2	91.5	93.6	6	0.2	0.003
1710	PLANER/ENCL	2	90.0	98.5	6	0.2	0.003

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ENVIRONMENTAL PROTECTION AGENCY                                    BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242               PLANT NO. =  6              NO DATES SPECIFIED

EQUIP.       EQUIPMENT           NO.OF    MEAN     M.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION          UNITS     LD       LD     PERS.    INDEX     P.I.

 1716    PLANER/ENCL                2     96.0     97.4      7       6.6    0.220
 1711    PLANER/ENCL                2     95.0     99.2     12       6.2    0.208
 1702    PLANER                     2    118.0    120.8      6       5.8    0.192
 1670    TRIMMER                    1     96.0     96.0      6       5.7    0.189
 1695    KILN CHAIN CONVYR          1     92.0     92.0      2       2.0    0.067
 1768    RESAW-SPECIALTY            2     96.5     97.2      2       2.0    0.067
 1764    RESAW-SPECIALTY            2    102.0    103.4      1       1.0    0.033
 1715    PLANER/ENCL                1     93.0     93.0      6       0.4    0.014
 1669    TRIMMER                    2     91.5     93.6      6       0.3    0.011
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242

PLANT NO. = 6

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1699	PLANER	9	99.0	104.0	79	23.3	0.333
1688	KILN CHAIN	11	87.8	90.2	46	15.0	0.214
1739	DRY CHAIN	2	87.0	91.2	30	11.6	0.166
1800	FORKLIFT	2	88.0	92.2	26	7.1	0.102
1664	TRIMMER	3	93.0	95.1	18	6.4	0.091
1759	RESAW/SPECIALTY	9	97.2	98.1	15	4.2	0.060
1685	KILN	1	85.0	85.0	2	2.0	0.029
1776	CONVEYOR/GEN	1	73.0	73.0	25	0.3	0.005

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ENVIRONMENTAL PROTECTION AGENCY
                                                            BBN JOB NO.   9635
                     EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                          THRESHOLD LEVEL           = 90.0 DBA
                          8-HR PERMISSIBLE LEVEL = 90.0 DBA
                          EXCHANGE RATE             = 5 DBA

SIC CODE =  242                  PLANT NO. =  6               NO DATES SPECIFIED

EQUIP.       EQUIPMENT            NO.OF    MEAN      M.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION           UNITS     LD        LD     PERS.    INDEX     P.I.

 1699    PLANER                     9      99.0     104.0     37       19.0    0.633
 1664    TRIMMER                    3      93.0      95.1     12        6.0    0.200
 1759    RESAW/SPECIALTY            9      97.2      98.1      3        3.0    0.100
 1688    KILN CHAIN                11      87.6      90.2      2        2.0    0.067
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Plant No. 9

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
21200	MILLWRIGHT/SAWMILL	8	93.1	93.1	65	65
13700	CHIPPER OPERATOR	2	98.2	99.3	26	29
23300	CARPENTERS	2	93.4	93.4	16	16
14000	RESAW OPERATOR	2	92.2	92.2	14	14
24500	OILER	2	91.4	91.4	13	13
24400	FILERS	2	91.0	91.0	12	12
10100	SAWMILL SUPERVISOR	2	90.9	90.9	12	12
11700	DECK SCALER	2	90.0	94.2	11	18
15400	STACKER-GREEN	2	88.7	92.5	9	15
20200	FORKLIFT OPERATOR	4	84.4	84.4	8	8
14500	GREEN CHAIN OPERATOR	2	87.8	90.3	8	11
15500	STICKERMAN-GREEN	2	87.1	90.7	7	12
26100	CLEAN-UP MAN/REGULAR	1	89.9	91.0	5	6
26200	CLEAN-UP MAN/DOWN TM	1	89.2	90.8	5	6
12300	SAWYER	2	82.2	82.2	2	2
17300	GRADER/PLANER MILL	1	84.0	84.0	2	2
13400	EDGER OPERATOR	2	81.3	81.3	1	1
14800	TRIMMER OPERATOR	2	78.8	75.8	0	0
17600	DRY CHAIN PULLER	4	77.0	78.4	0	1
16000	KILN OPERATOR	2	77.4	85.8	0	9
11400	DEBARKER OPERATOR	2	76.0	75.0	0	0
18200	TALLYMEN	1	<75.0	<75.0	0	0
21900	MACHINISTS	1	<75.0	<75.0	0	0
22300	MECHANICS	7	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                               BBN JOB NO.   9635

                              PERSONNEL NOISE EXPOSURE AND IMPACT

                              THRESHOLD LEVEL          = 90.0 DBA
                              8-HR PERMISSIBLE LEVEL   = 90.0 DBA
                              EXCHANGE RATE            = 5 DBA

SIC CODE =  242                 PLANT NO. =  9             NO DATES SPECIFIED

  JOB      JOB DESCRIPTION            NO. OF     SOUND LEVEL      DAILY NOISE DOSE
  CODE                                PERS.     MEAN     W.C.     MEAN      W.C.

 13700     CHIPPER OPERATOR             2       96.0     96.7     2.29      2.52
 23300     CARPENTERS                   2       93.3     93.3     1.58      1.58
 21200     MILLWRIGHT/SAWMILL           8       92.4     92.4     1.40      1.40
 14000     RESAW OPERATOR               2       90.9     90.9     1.14      1.14
 24500     OILER                        2       90.5     90.5     1.08      1.14
 24400     FILERS                       2      <90.0    <90.0     0.86      1.08
 10100     SAWMILL SUPERVISOR           2      <90.0    <90.0     0.81      0.86
 15400     STACKER-GREEN                2      <90.0     90.2     0.57      0.81
 26200     CLEAN-UP MAN/DOWN TM         1      <90.0    <90.0     0.53      1.03
 26100     CLEAN-UP MAN/REGULAR         1      <90.0    <90.0     0.26      0.69
 11400     DEBARKER OPERATOR            2      <90.0    <90.0     0.00      0.39
 11700     DECK SCALER                  2      <90.0     94.2     0.00      0.0
 12300     SAWYER                       2      <90.0    <90.0     0.00      1.80
 13400     EDGER OPERATOR               2      <90.0    <90.0     0.00      0.0
 14500     GREEN CHAIN OPERATOR         2      <90.0    <90.0     0.00      0.0
 14800     TRIMMER OPERATOR             2      <90.0    <90.0     0.00      0.74
 15500     STICKERMAN-GREEN             2      <90.0    <90.0     0.00      0.0
 16000     KILN OPERATOR                2      <90.0    <90.0     0.00      0.78
 17300     GRADER/PLANER MILL           1      <90.0    <90.0     0.00      0.55
 17600     DRY CHAIN PULLER             4      <90.0    <90.0     0.00      0.0
 18200     TALLYMEN                     1      <90.0    <90.0     0.00      0.0
 20200     FORKLIFT OPERATOR            4      <90.0    <90.0     0.00      0.0
 21900     MACHINISTS                   1      <90.0    <90.0     0.00      0.0
 22300     MECHANICS                    7      <90.0    <90.0     0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242   PLANT NO. = 9   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	LEV. WT. POP. MEAN	LEV. WT. POP. W.C.
212	MILLWRIGHT/SAWMILL	8	93.1	93.1	65	65
137	CHIPPER OPERATOR	2	98.2	99.3	26	29
233	CARPENTERS	2	93.4	93.4	16	16
140	RESAW OPERATOR	2	92.2	92.2	14	14
245	OILER	2	91.4	91.4	13	13
244	FILERS	2	91.0	91.0	12	12
101	SAWMILL SUPERVISOR	2	90.9	90.9	12	12
117	DECK SCALER	2	90.0	94.2	11	18
154	STACKER-GREEN	2	88.7	92.5	9	15
202	FORKLIFT OPERATOR	4	84.4	84.4	8	8
145	GREEN CHAIN OPERATOR	2	87.8	90.3	8	11
155	STICKERMAN-GREEN	2	87.1	90.7	7	12
261	CLEAN-UP MAN/REGULAR	1	89.9	91.0	5	6
262	CLEAN-UP MAN/DOWN TM	1	89.2	90.8	5	6
123	SAWYER	2	82.2	82.2	2	2
173	GRADER/PLANER MILL	1	84.0	84.0	2	2
134	EDGER OPERATOR	2	81.3	81.3	1	1
148	TRIMMER OPERATOR	2	78.8	78.8	0	0
176	DRY CHAIN PULLER	4	77.0	75.4	0	1
160	KILN OPERATOR	2	77.4	88.8	0	9
114	DEBARKER OPERATOR	2	76.0	76.0	0	0
182	TALLYMEN	1	<75.0	<75.0	0	0
219	MACHINISTS	1	<75.0	<75.0	0	0
223	MECHANICS	7	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                     PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                    EPA CRITERIA

SIC CODE =  242                 PLANT NO. =  9               NO DATES SPECIFIED




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TOTAL NUMBER OF PERSONNEL                                         58
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                    49
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                    49
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                    20
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                    30
LEVEL WEIGHTED POPULATION (MEAN)                                 226.9
LEVEL WEIGHTED POPULATION (W.C.)                                 263.1

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
137	CHIPPER OPERATOR	2	96.0	96.7	2.29	2.52
233	CARPENTERS	2	93.3	93.3	1.58	1.58
212	MILLWRIGHT/SAWMILL	8	92.4	92.4	1.40	1.40
140	RESAW OPERATOR	2	90.9	90.9	1.14	1.14
245	OILER	2	90.5	90.5	1.08	1.08
244	FILERS	2	<90.0	<90.0	0.86	0.86
101	SAWMILL SUPERVISOR	2	<90.0	<90.0	0.81	0.81
154	STACKER-GREEN	2	<90.0	90.2	0.57	1.03
262	CLEAN-UP MAN/DOWN TM	1	<90.0	<90.0	0.53	0.69
261	CLEAN-UP MAN/REGULAR	1	<90.0	<90.0	0.26	0.39
114	DEBARKER OPERATOR	2	<90.0	<90.0	0.00	0.0
117	DECK SCALER	2	<90.0	94.2	0.00	1.80
123	SAWYER	2	<90.0	<90.0	0.00	0.0
134	EDGER OPERATOR	2	<90.0	<90.0	0.00	0.0
145	GREEN CHAIN OPERATOR	2	<90.0	<90.0	0.00	0.74
148	TRIMMER OPERATOR	2	<90.0	<90.0	0.00	0.0
155	STICKERMAN-GREEN	2	<90.0	<90.0	0.00	0.78
160	KILN OPERATOR	2	<90.0	<90.0	0.00	0.55
173	GRADER/PLANER MILL	1	<90.0	<90.0	0.00	0.0
176	DRY CHAIN PULLER	4	<90.0	<90.0	0.00	0.0
182	TALLYMEN	1	<90.0	<90.0	0.00	0.0
202	FORKLIFT OPERATOR	4	<90.0	<90.0	0.00	0.0
219	MACHINISTS	1	<90.0	<90.0	0.00	0.0
223	MECHANICS	7	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY                                 BBN JOB NO.    9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242                PLANT NO. =  9              NO DATES SPECIFIED




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                       TOTAL NUMBER OF PERSONNEL          =       58
                       TOTAL NUMBER OVEREXPOSED (MEAN) =       16
                       TOTAL NUMBER OVEREXPOSED (W.C.) =       20

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	M.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1623	HEADRIG	1	83.0	83.0	59	8.0	0.163
1638	BACK. ONLY CONTR.	0	66.8	66.8	52	5.6	0.114
1647	RESAW-LARGE	1	93.0	93.0	27	5.3	0.108
1802	FORKLIFT	1	86.6	86.6	4	4.0	0.082
1693	KILN CHAIN CONVYR	2	77.0	78.4	4	4.0	0.082
1687	KILN	2	82.0	93.3	2	2.0	0.041
1670	TRIMMER	1	80.0	80.0	26	2.0	0.040
1636	EDGER	1	82.0	82.0	2	1.8	0.036
1690	KILN CHAIN CONVYR	2	91.0	95.2	2	1.7	0.034
1682	GREEN CHAIN CONVY	2	90.0	92.8	2	1.7	0.034
1691	KILN CHAIN CONVYR	2	89.0	93.2	2	1.5	0.032
1782	CHIPPER/ENCL	2	107.0	108.4	2	1.5	0.031
1696	KILN CHAIN CONVYR	1	84.0	84.0	1	1.0	0.020
1689	BACK/KILN CHAIN	1	83.7	83.7	4	0.8	0.016
1669	TRIMMER	1	77.0	77.0	2	0.7	0.014
1680	BACK/GREEN CHAIN	1	83.1	83.1	2	0.3	0.007
1635	EDGER	1	76.0	76.0	2	0.2	0.005
1646	RESAW-LARGE	1	88.5	88.5	2	0.2	0.004
1622	HEADRIG	1	78.0	76.0	2	0.2	0.004

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ENVIRONMENTAL PROTECTION AGENCY
                                                          BBN JOB NO.   9635
                      EQUIPMENT NOISE CONTROL PRIORITY

                      THRESHOLD LEVEL           = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE             = 5 DBA

SIC CODE =  242              PLANT NO. =  9            NO DATES SPECIFIED

EQUIP.        EQUIPMENT           NO.OF    MEAN     W.C.   NO.OF  PRIORITY   NORM.
 CODE        DESCRIPTION          UNITS     LJ       LJ    PERS.   INDEX     P.I.

 1647     RESAW-LARGE               1      93.0     93.0     18        4.5   0.283
 1638     BACK. ONLY CONTR.         0      66.8     66.8     32        4.5   0.279
 1623     HEADRIG                   1      83.0     83.0     32        4.0   0.252
 1782     CHIPPER/ENCL              2     107.0    108.4      2        0.9   0.058
 1670     TRIMMER                   1      80.0     80.0     18        0.5   0.033
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 242 PLANT NO. = 9 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	M.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1688	KILN CHAIN	9	84.1	87.6	13	9.0	0.184
1620	HEADRIG	2	80.5	80.5	61	8.2	0.167
1629	EDGER	2	80.0	80.0	56	7.6	0.155
1644	RESAW/LARGE	4	91.6	91.6	29	5.5	0.113
1600	DEBARKER	1	79.0	79.0	7	4.0	0.082
1800	FORKLIFT	1	86.6	86.6	4	4.0	0.082
1664	TRIMMER	2	78.5	78.5	28	2.6	0.054
1776	CONVEYOR/GEN	1	90.0	90.0	45	2.5	0.052
1685	KILN	2	82.0	93.3	2	2.0	0.041
1679	GREEN CHAIN	3	87.7	90.5	4	2.0	0.041
1779	CHIPPER	4	102.5	104.7	2	1.5	0.031

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                    EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  242                 PLANT NO. =  9              NO DATES SPECIFIED

EQUIP.       EQUIPMENT              NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION             UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1644     RESAW/LARGE                 4      91.6     91.6     20        4.5    0.283
 1629     EDGER                       2      80.0     80.0     32        4.5    0.279
 1620     HEADRIG                     2      80.5     80.5     32        4.0    0.252
 1776     CONVEYOR/GEN                1      90.0     90.0     22        1.5    0.095
 1779     CHIPPER                     4     102.5    104.7      2        0.9    0.058
 1664     TRIMMER                     2      78.5     78.5     18        0.5    0.033
```

APPENDIX F

Foundry Industry - Individual Plant Results

The results presented here for each plant are in the form of eight tables, which correspond to tables 5-21 to 5-29 (excluding 5-27) in section 5, corresponding to the industry average results. There is one group of eight tables for each of the seven plants.

Plant No. 1

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 1 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	PUP. W.C.
34000	SQUEZ/JOLT MOLDER OP	14	92.7	92.7	109	109
36700	POURER	6	95.9	95.9	65	65
45000	DUMPOUT/SHAKEOUT OP	2	103.7	103.7	41	41
28000	WHEEL GRINDER OPER	6	91.4	91.4	40	40
20200	FORKLIFT OPERATOR	2	100.1	100.1	31	31
45900	SHIFTER	3	92.3	92.3	22	22
33900	AUTO-MOLDER OPERATOR	2	93.2	93.2	16	16
46700	WHELLABRATOR OPER	1	100.1	100.1	15	15
46100	INSPECTOR	1	99.3	99.3	14	14
32700	INDUCT. FURNACE OPER	1	98.6	98.6	13	13
32800	FURNACE CHARGER	1	95.9	95.9	10	10
42100	SHELL CORE OPERATOR	1	94.6	94.6	9	9
27600	PN DRILL GRINDER OP	1	94.1	94.1	9	9
46200	CUPOLA OPERATOR	1	92.0	92.0	7	7
42700	CORE GLUER	1	90.2	90.2	5	5
38500	MULLER OPER	1	89.5	89.5	5	5

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 332　PLANT NO. = 1　NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL		DAILY NOISE DOSE	
			MEAN	W.C.	MEAN	W.C.
45000	DUMPOUT/SHAKEOUT OP	2	103.1	103.1	6.13	6.13
46700	WHELLABRATOR OPER	1	99.5	99.5	3.73	3.73
20200	FORKLIFT OPERATOR	2	98.1	98.1	3.09	3.09
32700	INDUCT. FURNACE OPER	1	97.4	97.4	2.80	2.80
46100	INSPECTOR	1	96.3	96.3	2.40	2.40
32800	FURNACE CHARGER	1	93.6	93.6	1.65	1.65
36700	POURER	6	93.6	93.6	1.65	1.65
42100	SHELL CORE OPERATOR	1	93.4	93.4	1.61	1.61
27600	PN DRILL GRINDER OP	1	93.4	93.4	1.60	1.60
33900	AUTO-MOLDER OPERATOR	2	92.4	92.4	1.39	1.39
34000	SQUEZ/JOLT MOLDER OP	14	91.4	91.4	1.22	1.22
46200	CUPOLA OPERATOR	1	90.4	90.4	1.06	1.06
28000	WHEEL GRINDER OPER	6	90.4	90.4	1.06	1.06
38500	MULLER OPER	1	<90.0	<90.0	0.69	0.69
45900	SHIFTER	3	<90.0	<90.0	0.55	0.55
42700	CORE GLUER	1	<90.0	<90.0	0.46	0.46

```
ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

               PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                               EPA CRITERIA

SIC CODE =  332            PLANT NO. =  1            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION        NO. OF    SOUND   LEVEL     LEV. WT. POP.
CODE                              PERS.     MEAN    W.C.      MEAN    W.C.

 340     SQUEZ/JOLT MOLDER OP      14       92.7    92.7      109      109
 367     POURER                     6       95.9    95.9       65       65
 450     DUMPOUT/SHAKEOUT OP        2      103.7   103.7       41       41
 280     WHEEL GRINDER OPER         6       91.4    91.4       40       40
 202     FORKLIFT OPERATOR          2      100.1   100.1       31       31
 459     SHIFTER                    3       92.3    92.3       22       22
 339     AUTO-MOLDER OPERATOR       2       93.2    93.2       16       16
 467     WHELLABRATOR OPER          1      100.1   100.1       15       15
 461     INSPECTOR                  1       99.3    99.3       14       14
 327     INDUCT. FURNACE OPER       1       98.6    98.6       13       13
 328     FURNACE CHARGER            1       95.9    95.9       10       10
 421     SHELL CORE OPERATOR        1       94.6    94.6        9        9
 276     PN DRILL GRINDER OP        1       94.1    94.1        9        9
 462     CUPOLA OPERATOR            1       92.0    92.0        7        7
 427     CORE GLUER                 1       90.2    90.2        5        5
 385     MULLER OPER                1       89.5    89.5        5        5



*************************************************************************

TOTAL NUMBER OF PERSONNEL                                    44
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)               44
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)               44
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)               43
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)               43
LEVEL WEIGHTED POPULATION (MEAN)                            419.0
LEVEL WEIGHTED POPULATION (W.C.)                            419.0

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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                  PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  332              PLANT NO. =  1               NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF     SOUND LEVEL      DAILY NOISE DOSE
 CODE                               PERS.      MEAN    W.C.     MEAN      W.C.

 450      DUMPOUT/SHAKEOUT OP          2      103.1   103.1     6.13      6.13
 467      WHELLABRATOR OPER            1       99.5    99.5     3.73      3.73
 202      FORKLIFT OPERATOR            2       98.1    98.1     3.09      3.09
 327      INDUCT. FURNACE OPER         1       97.4    97.4     2.80      2.80
 461      INSPECTOR                    1       96.3    96.3     2.40      2.40
 328      FURNACE CHARGER              1       93.6    93.6     1.65      1.65
 367      POURER                       6       93.6    93.6     1.65      1.65
 421      SHELL CORE OPERATOR          1       93.4    93.4     1.61      1.61
 276      PN DRILL GRINDER OP          1       93.4    93.4     1.60      1.60
 339      AUTO-MOLDER OPERATOR         2       92.4    92.4     1.39      1.39
 340      SQUEZ/JOLT MOLDER OP        14       91.4    91.4     1.22      1.22
 462      CUPOLA OPERATOR              1       90.4    90.4     1.06      1.06
 280      WHEEL GRINDER OPER           6       90.4    90.4     1.06      1.06
 385      MULLER OPER                  1      <90.0   <90.0     0.69      0.69
 459      SHIFTER                      3      <90.0   <90.0     0.55      0.55
 427      CORE GLUER                   1      <90.0   <90.0     0.46      0.46



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                 TOTAL NUMBER OF PERSONNEL          =       44
                 TOTAL NUMBER OVEREXPOSED (MEAN)    =       39
                 TOTAL NUMBER OVEREXPOSED (W.C.)    =       39

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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1338	SQUEZ/JOLT MOLDER	1	94.0	94.0	35	14.0	0.317
1438	INDUCT. FURNACE	1	100.0	100.0	13	8.5	0.193
1513	WHEEL GRINDER	1	92.0	92.0	8	5.5	0.124
1490	SHAKEOUT CONVEYOR	1	105.0	105.0	23	5.3	0.120
1440	FURNACE	1	93.0	93.0	13	2.4	0.054
1335	AUTO-MOLDER	1	94.0	94.0	21	2.3	0.052
1450	SHELL CORE	1	96.0	96.0	21	2.0	0.045
1117	PN DRILL GRINDER	1	95.0	95.0	3	1.0	0.022
1499	WHEELABRATOR	1	100.0	100.0	18	0.9	0.020
1374	MULLER	1	91.0	91.0	1	0.9	0.019
1511	BACK/ELEC GRINDER	1	88.0	88.0	6	0.5	0.012
1493	BACK. ONLY CONTR.	0	82.8	82.8	17	0.5	0.011
1494	SHAKEOUT TABLE	1	97.0	97.0	3	0.2	0.004
1493	BACK. ONLY CONTR.	0	82.8	82.8	17	0.5	0.011

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ENVIRONMENTAL PROTECTION AGENCY
                                                          BBN JOB NO.    9635
                      EQUIPMENT NOISE CONTROL PRIORITY

                      THRESHOLD LEVEL          = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE            = 5 DBA

SIC CODE =  332              PLANT NO. =  1                NO DATES SPECIFIED

EQUIP.       EQUIPMENT           NO.OF    MEAN    W.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION          UNITS     LJ      LJ    PERS.    INDEX     P.I.

 1338    SQUEZ/JOLT MOLDER         1      94.0    94.0     16       14.2    0.363
 1438    INDUCT. FURNACE           1     100.0   100.0     10        6.5    0.166
 1513    WHEEL GRINDER             1      92.0    92.0      6        6.0    0.154
 1490    SHAKEOUT CONVEYOR         1     105.0   105.0      6        4.0    0.103
 1440    FURNACE                   1      93.0    93.0     10        3.1    0.079
 1335    AUTO-MOLDER               1      94.0    94.0      2        2.0    0.051
 1117    PN DRILL GRINDER          1      95.0    95.0      1        1.0    0.026
 1450    SHELL CORE                1      96.0    96.0      1        1.0    0.026
 1499    WHEELABRATOR              1     100.0   100.0      1        1.0    0.026
 1494    SHAKEOUT TABLE            1      97.0    97.0      3        0.3    0.0
```

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 1 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1333	MOLDER	2	94.0	94.0	56	16.3	0.369
1434	FURNACE	2	96.5	96.5	26	10.9	0.247
1510	ELECTRIC GRINDERS	2	90.0	90.0	14	6.0	0.137
1484	SHAKEOUT/DUMPOUT	2	101.0	101.0	43	5.9	0.134
1448	CORE OVEN	1	96.0	96.0	21	2.0	0.045
1103	PNEUMATIC GRINDER	1	95.0	95.0	3	1.0	0.022
1497	WHEELABRATOR	1	100.0	100.0	18	0.9	0.020
1371	MULLER	1	91.0	91.0	1	0.9	0.019

```
ENVIRONMENTAL PROTECTION AGENCY
                                                          BBN JOB NO.   9635
                  EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                         THRESHOLD LEVEL            = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE              = 5 DBA

SIC CODE =  332              PLANT NO. =  1               NO DATES SPECIFIED

EQUIP.       EQUIPMENT           NO.OF     MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION          UNITS      LD       LD     PERS.    INDEX     P.I.

 1333    MOLDER
 1434    FURNACE                   2       94.0     94.0     18       16.2    0.415
 1510    ELECTRIC GRINDERS         2       96.5     96.5     20        9.5    0.245
 1484    SHAKEOUT/DUMPOUT          2       90.0     90.0     12        6.0    0.154
 1448    CORE OVEN                 2      101.0    101.0      9        4.3    0.111
 1103    PNEUMATIC GRINDER         1       96.0     96.0      1        1.0    0.026
 1497    WHEELABRATOR              1       95.0     95.0      1        1.0    0.026
 1525    HAMMERING                 1      100.0    100.0      1        0.6    0.017
                                   1      100.0    100.0      1        0.3    0.009
```

Plant No. 2

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332   PLANT NO. = 2   NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
28200	TRIM GRINDER OPER	4	99.9	99.9	61	61
34000	SQUEZ/JOLT MOLDER OP	4	96.6	96.6	46	46
42100	SHELL CORE OPERATOR	5	93.2	93.2	41	41
32500	FURNACE OPERATOR	4	93.5	93.5	34	34
42200	NO-BAKE CORE OPER	5	91.3	91.3	33	33
50400	RADIAL SAW OPERATOR	2	99.9	99.9	30	30
28100	STAND STONE GRINDER	4	90.4	91.0	23	25
42600	CORE SETTER	3	92.4	92.4	22	22
44001	SHAKEOUT OPERATOR	4	89.7	93.7	21	35
34100	FLOOR MOLDER	2	94.8	94.8	19	19
50200	BAND SAW OPERATOR	2	92.5	92.5	15	15
36700	POURER	2	90.4	90.4	11	11
36701	POURER	2	90.4	90.4	11	11
44000	SHAKEOUT OPERATOR	2	90.1	94.7	11	19
38500	MULLER OPER	1	88.7	91.0	4	6
38501	MULLER OPER	1	88.7	91.0	4	6
40200	ROTOBLAST OPERATOR	1	88.0	88.0	4	4

```
ENVIRONMENTAL PROTECTION AGENCY                           BBN JOB NO.   9635

                       PERSONNEL NOISE EXPOSURE AND IMPACT

                        THRESHOLD LEVEL         = 90.0 DBA
                        8-HR PERMISSIBLE LEVEL = 90.0 DBA
                        EXCHANGE RATE           = 5 DBA

SIC CODE =  332             PLANT NO. =  2             NO DATES SPECIFIED

  JOB      JOB DESCRIPTION        NO. OF    SOUND LEVEL     DAILY NOISE DOSE
 CODE                             PERS.     MEAN    W.C.     MEAN     W.C.

28200     TRIM GRINDER OPER          4      98.3    98.3     3.17     3.17
50400     RADIAL SAW OPERATOR        2      98.3    98.3     3.17     3.17
34000     SQUEZ/JOLT MOLDER OP       4      95.4    95.4     2.12     2.12
42600     CORE SETTER                3      91.4    91.4     1.21     1.21
32500     FURNACE OPERATOR           4      91.3    91.3     1.20     1.20
42100     SHELL CORE OPERATOR        5      91.0    91.0     1.15     1.15
34100     FLOOR MOLDER               2      90.4    90.4     1.06     1.06
50200     BAND SAW OPERATOR          2      90.3    90.3     1.04     1.04
42200     NO-BAKE CORE OPER          5     <90.0   <90.0     0.87     0.87
44000     SHAKEOUT OPERATOR          2     <90.0    93.8     0.86     1.70
28100     STAND STONE GRINDER        4     <90.0   <90.0     0.74     0.81
44001     SHAKEOUT OPERATOR          4     <90.0    91.8     0.64     1.28
36700     POURER                     2     <90.0   <90.0     0.40     0.40
36701     POURER                     2     <90.0   <90.0     0.40     0.40
38500     MULLER OPER                1     <90.0   <90.0     0.00     0.90
38501     MULLER OPER                1     <90.0   <90.0     0.00     0.90
40200     ROTOBLAST OPERATOR         1     <90.0   <90.0     0.00     0.0
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ENVIRONMENTAL PROTECTION AGENCY
                                                        BBN JOB NO.   9635
                PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                 EPA CRITERIA

SIC CODE =  332              PLANT NO. =  2            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF    SOUND   LEVEL     LEV. WT. POP.
CODE                                PERS.      MEAN    W.C.      MEAN    W.C.

 282      TRIM GRINDER OPER           4        99.9    99.9       61      61
 340      SQUEZ/JOLT MOLDER OP        4        96.6    96.6       46      46
 421      SHELL CORE OPERATOR         5        93.2    93.2       41      41
 325      FURNACE OPERATOR            4        93.5    93.5       34      34
 422      NO-BAKE CORE OPER           5        91.3    91.3       33      33
 440      SHAKEOUT OPERATOR           6        89.8    94.0       32      54
 504      RADIAL SAW OPERATOR         2        99.9    99.9       30      30
 281      STAND STONE GRINDER         4        90.4    91.0       23      25
 367      POURER                      4        90.4    90.4       23      23
 426      CORE SETTER                 3        92.4    92.4       22      22
 341      FLOOR MOLDER                2        94.8    94.8       19      19
 502      BAND SAW OPERATOR           2        92.5    92.5       15      15
 385      MULLER OPER                 2        88.7    91.0        9      12
 402      ROTOBLAST OPERATOR          1        88.0    88.0        4       4



**********************************************************************

TOTAL NUMBER OF PERSONNEL                                    48
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)               48
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)               48
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)               41
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)               47
LEVEL WEIGHTED POPULATION (MEAN)                            399.5
LEVEL WEIGHTED POPULATION (W.C.)                            426.1

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                       THRESHOLD LEVEL          = 90.0 DBA
                       8-HR PERMISSIBLE LEVEL = 90.0 DBA
                       EXCHANGE RATE            = 5 DBA

SIC CODE =  332                PLANT NO. =  2              NO DATES SPECIFIED

 JOB      JOB DESCRIPTION          NO. OF    SOUND LEVEL     DAILY NOISE DOSE
CODE                               PERS.     MEAN    W.C.     MEAN     W.C.

 282     TRIM GRINDER OPER            4      98.3    98.3     3.17     3.17
 504     RADIAL SAW OPERATOR          2      98.3    98.3     3.17     3.17
 340     SQUEZ/JOLT MOLDER OP         4      95.4    95.4     2.12     2.12
 426     CORE SETTER                  3      91.4    91.4     1.21     1.21
 325     FURNACE OPERATOR             4      91.3    91.3     1.20     1.20
 421     SHELL CORE OPERATOR          5      91.0    91.0     1.15     1.15
 341     FLOOR MOLDER                 2      90.4    90.4     1.06     1.06
 502     BAND SAW OPERATOR            2      90.3    90.3     1.04     1.04
 422     NO-BAKE CORE OPER            5     <90.0   <90.0     0.87     0.87
 281     STAND STONE GRINDER          4     <90.0   <90.0     0.74     0.81
 440     SHAKEOUT OPERATOR            6     <90.0    92.5     0.71     1.42
 367     POURER                       4     <90.0   <90.0     0.40     0.40
 385     MULLER OPER                  2     <90.0   <90.0     0.00     0.90
 402     ROTOBLAST OPERATOR           1     <90.0   <90.0     0.00     0.0


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               TOTAL NUMBER OF PERSONNEL           =        48
               TOTAL NUMBER OVEREXPOSED (MEAN)     =        26
               TOTAL NUMBER OVEREXPOSED (W.C.)     =        32

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ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332

PLANT NO. = 2

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1503	RADIAL SAW	1	102.0	102.0	26	6.6	0.137
1486	SHAKEOUT	2	90.5	95.4	20	6.5	0.135
1446	CRUCIBLE	1	95.0	95.0	12	6.1	0.127
1450	SHELL CORE	1	96.0	96.0	15	5.1	0.105
1451	NO-BAKE CORE	1	94.0	94.0	15	4.9	0.103
1502	BAND SAW	1	94.0	94.0	22	4.3	0.089
1338	SQUEZ/JOLT MOLDER	1	98.0	98.0	8	4.0	0.083
1459	CORE SET LINE	1	93.0	93.0	17	3.2	0.066
1517	STAND STONE GRIND	2	91.5	92.2	4	3.1	0.064
1374	MULLER	2	89.0	91.8	16	1.9	0.039
1482	PN VIBRATOR	1	102.0	102.0	22	1.4	0.029
1146	PN TAMPER	1	97.0	97.0	2	0.7	0.014
1194	ROTOBLAST	1	88.0	88.0	1	0.3	0.006
1435	BACK/FURNACE	1	83.5	83.5	4	0.1	0.002

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ENVIRONMENTAL PROTECTION AGENCY                                   BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL         = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                         EXCHANGE RATE           = 5 DBA

SIC CODE =  332              PLANT NO. =  2              NO DATES SPECIFIED

EQUIP.        EQUIPMENT            NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION           UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1503      RADIAL SAW                1     102.0    102.0      6        6.0     0.231
 1450      SHELL CORE                1      96.0     96.0      5        5.0     0.192
 1338      SQUEZ/JOLT MOLDER         1      98.0     98.0      4        4.0     0.154
 1446      CRUCIBLE                  1      95.0     95.0      4        4.0     0.154
 1459      CORE SET LINE             1      93.0     93.0      3        3.0     0.115
 1502      BAND SAW                  1      94.0     94.0      2        2.0     0.077
 1146      PN TAMPER                 1      97.0     97.0      2        1.0     0.038
 1482      PN VIBRATOR               1     102.0    102.0      2        1.0     0.038
```

ENVIRONMENTAL PROTECTION AGENCY

BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332

PLANT NO. = 2

NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1500	SAW/METAL	2	98.0	98.0	48	10.8	0.226
1448	CORE OVEN	2	95.0	95.0	30	10.0	0.208
1484	SHAKEOUT/DUMPOUT	2	90.5	95.4	20	6.5	0.135
1444	CRUCIBLE	1	95.0	95.0	12	6.1	0.127
1333	MOLDER	1	98.0	98.0	8	4.0	0.083
1457	CORE SET LINE	1	93.0	93.0	17	3.2	0.066
1510	ELECTRIC GRINDERS	3	90.3	91.0	4	3.1	0.064
1371	MULLER	2	89.0	91.8	16	1.9	0.039
1480	PNEUMATIC VIBRATOR	1	102.0	102.0	22	1.4	0.029
1144	PNEUMATIC TAMPER	1	97.0	97.0	2	0.7	0.014
1187	ABRASIVE BLASTING	1	88.0	88.0	1	0.3	0.006
1434	FURNACE	1	83.5	83.5	4	0.1	0.002

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 332 PLANT NO. = 2 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1500	SAW/METAL	2	98.0	98.0	8	8.0	0.308
1448	CORE OVEN	2	95.0	95.0	5	5.0	0.192
1333	MOLDER	1	98.0	98.0	4	4.0	0.154
1444	CRUCIBLE	1	95.0	95.0	4	4.0	0.154
1457	CORE SET LINE	1	93.0	93.0	3	3.0	0.115
1480	PNEUMATIC VIBRATOR	1	102.0	102.0	2	1.0	0.038
1144	PNEUMATIC TAMPER	1	97.0	97.0	2	1.0	0.038

Plant No. 3

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 3 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
30200	ARC-AIR OPERATOR	6	99.1	99.1	87	87
36700	POURER	4	98.9	98.9	57	57
27700	PN DISC GRINDER OPER	4	95.2	96.6	40	46
27500	PN GRINDER OPER	6	90.7	90.7	36	36
44300	SHAKEOUT TABLE OPER	2	101.5	101.5	35	35
50500	CUT-OFF WHEEL OPER	2	99.8	99.8	30	30
39500	SANDSLINGER OPERATOR	2	99.2	99.2	29	29
33800	SHELLMOLDER OPERATOR	4	91.5	91.5	27	27
42100	SHELL CORE OPERATOR	4	91.5	91.5	27	27
27800	PN CONE GRINDER OPER	3	93.1	94.5	24	28
27900	SWING GRINDER OPER	3	92.0	92.0	21	21
32600	ARC FURNACE OPERATOR	1	101.1	101.1	16	16
33700	HI PRESS. MOLDER OP	2	92.8	92.8	15	15
40500	SPIRALBLAST OPERATOR	1	96.5	96.5	11	11
28100	STAND STONE GRINDER	2	90.0	90.0	11	11
38800	SANDMULLER OPERATOR	1	95.9	95.9	10	10
34200	PACEMAKER MOLDR OPER	1	94.2	94.2	9	9
43300	CORE ROOM WORKER	17	79.6	79.6	9	9
46700	WHELLABRATOR OPER	2	87.8	87.8	8	8
35000	MOLD WASH WORKER	1	92.5	92.5	7	7
32700	INDUCT. FURNACE OPER	2	86.3	86.3	6	6

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ENVIRONMENTAL PROTECTION AGENCY
                                                              BBN JOB NO.    9635
                              PERSONNEL NOISE EXPOSURE AND IMPACT

                               THRESHOLD LEVEL           = 90.0 DBA
                               8-HR PERMISSIBLE LEVEL = 90.0 DBA
                               EXCHANGE RATE             = 5 DBA

   SIC CODE =   332               PLANT NO. =   3              NO DATES SPECIFIED

   JOB        JOB DESCRIPTION           NO. OF      SOUND LEVEL       DAILY NOISE DOSE
   CODE                                 PERS.      MEAN     W.C.      MEAN        W.C.

  32600     ARC FURNACE OPERATOR         1       100.4    100.4      4.22        4.22
  44300     SHAKEOUT TABLE OPER          2        99.6     99.6      3.81        3.81
  50500     CUT-OFF WHEEL OPER           2        98.3     98.3      3.17        3.17
  39500     SANDSLINGER OPERATOR         2        97.6     97.6      2.87        2.87
  36700     POURER                       4        97.2     97.2      2.72        2.72
  30200     ARC-AIR OPERATOR             6        97.0     97.0      2.64        2.64
  38800     SANDMULLER OPERATOR          1        95.5     95.5      2.14        2.14
  40500     SPIRALBLAST OPERATOR         1        95.4     95.4      2.12        2.12
  27700     PN DISC GRINDER OPER         4        93.0     94.4      1.52        1.84
  34200     PACEMAKER MOLDR OPER         1        91.4     91.4      1.21        1.21
  33700     HI PRESS. MOLDER OP          2        91.4     91.4      1.21        1.21
  27800     PN CONE GRINDER OPER         3        90.7     92.2      1.10        1.36
  27900     SWING GRINDER OPER           3        90.4     90.4      1.06        1.06
  33800     SHELLMOLDER OPERATOR         4       <90.0    <90.0      0.87        0.87
  42100     SHELL CORE OPERATOR          4       <90.0    <90.0      0.87        0.87
  35000     MOLD WASH WORKER             1       <90.0    <90.0      0.87        0.87
  27500     PN GRINDER OPER              6       <90.0    <90.0      0.87        0.87
  28100     STAND STONE GRINDER          2       <90.0    <90.0      0.76        0.76
  32700     INDUCT. FURNACE OPER         2       <90.0    <90.0      0.69        0.69
  43300     CORE ROOM WORKER            17       <90.0    <90.0      0.00        0.0
  46700     WHELLABRATOR OPER            2       <90.0    <90.0      0.00        0.0
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ENVIRONMENTAL PROTECTION AGENCY
                                                      BBN JOB NO.   9635
                 PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                 EPA CRITERIA

SIC CODE =  332             PLANT NO. =  3            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION          NO. OF    SOUND   LEVEL      LEV. WT.  POP.
CODE                                PERS.     MEAN    W.C.       MEAN     W.C.

 302       ARC-AIR OPERATOR            6       99.1    99.1        87       87
 367       POURER                      4       98.9    98.9        57       57
 277       PN DISC GRINDER OPER        4       95.2    96.6        40       46
 275       PN GRINDER OPER             6       90.7    90.7        36       36
 443       SHAKEOUT TABLE OPER         2      101.5   101.5        35       35
 505       CUT-OFF WHEEL OPER          2       99.8    99.8        30       30
 395       SANDSLINGER OPERATOR        2       99.2    99.2        29       29
 338       SHELLMOLDER OPERATOR        4       91.5    91.5        27       27
 421       SHELL CORE OPERATOR         4       91.5    91.5        27       27
 278       PN CONE GRINDER OPER        3       93.1    94.5        24       28
 279       SWING GRINDER OPER          3       92.0    92.0        21       21
 326       ARC FURNACE OPERATOR        1      101.1   101.1        16       16
 337       HI PRESS. MOLDER OP         2       92.8    92.8        15       15
 405       SPIRALBLAST OPERATOR        1       96.5    96.5        11       11
 281       STAND STONE GRINDER         2       90.0    90.0        11       11
 388       SANDMULLER OPERATOR         1       95.9    95.9        10       10
 342       PACEMAKER MOLDR OPER        1       94.2    94.2         9        9
 433       CORE ROOM WORKER           17       79.6    79.6         9        9
 467       WHELLABRATOR OPER           2       87.8    87.8         8        8
 350       MOLD WASH WORKER            1       92.5    92.5         7        7
 327       INDUCT. FURNACE OPER        2       86.3    86.3         6        6


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TOTAL NUMBER OF PERSONNEL                                        70
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                   70
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                   70
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                   47
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                   47
LEVEL WEIGHTED POPULATION (MEAN)                                524.7
LEVEL WEIGHTED POPULATION (W.C.)                                534.3

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ENVIRONMENTAL PROTECTION AGENCY
                                                        BBN JOB NO.   9635

                 PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                       THRESHOLD LEVEL            = 90.0 DBA
                       8-HR PERMISSIBLE LEVEL     = 90.0 DBA
                       EXCHANGE RATE              = 5 DBA

SIC CODE =  332                 PLANT NO. =  3              NO DATES SPECIFIED

 JOB       JOB DESCRIPTION         NO. OF     SOUND LEVEL     DAILY NOISE DOSE
 CODE                              PERS.     MEAN    W.C.      MEAN     W.C.

 326      ARC FURNACE OPERATOR        1     100.4   100.4      4.22     4.22
 443      SHAKEOUT TABLE OPER         2      99.6    99.6      3.81     3.81
 505      CUT-OFF WHEEL OPER          2      98.3    98.3      3.17     3.17
 395      SANDSLINGER OPERATOR        2      97.6    97.6      2.87     2.87
 367      POURER                      4      97.2    97.2      2.72     2.72
 302      ARC-AIR OPERATOR            6      97.0    97.0      2.64     2.64
 388      SANDMULLER OPERATOR         1      95.5    95.5      2.14     2.14
 405      SPIRALBLAST OPERATOR        1      95.4    95.4      2.12     2.12
 277      PN DISC GRINDER OPER        4      93.0    94.4      1.52     1.84
 342      PACEMAKER MOLDR OPER        1      91.4    91.4      1.21     1.21
 337      HI PRESS. MOLDER OP         2      91.4    91.4      1.21     1.21
 278      PN CONE GRINDER OPER        3      90.7    92.2      1.10     1.36
 279      SWING GRINDER OPER          3      90.4    90.4      1.06     1.06
 338      SHELLMOLDER OPERATOR        4     <90.0   <90.0      0.87     0.87
 421      SHELL CORE OPERATOR         4     <90.0   <90.0      0.87     0.87
 350      MOLD WASH WORKER            1     <90.0   <90.0      0.87     0.87
 275      PN GRINDER OPER             6     <90.0   <90.0      0.76     0.76
 281      STAND STONE GRINDER         2     <90.0   <90.0      0.69     0.69
 327      INDUCT. FURNACE OPER        2     <90.0   <90.0      0.00     0.0
 433      CORE ROOM WORKER           17     <90.0   <90.0      0.00     0.0
 467      WHELLABRATOR OPER           2     <90.0   <90.0      0.00     0.0




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              TOTAL NUMBER OF PERSONNEL              =       70
              TOTAL NUMBER OVEREXPOSED (MEAN)        =       32
              TOTAL NUMBER OVEREXPOSED (W.C.)        =       32

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 3 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1452	CORE OVEN	1	82.0	82.0	34	17.0	0.243
1160	ARC AIR GOUGERS	1	102.0	102.0	18	6.7	0.095
1120	PN WHEEL GRINDER	1	93.0	93.0	6	5.1	0.073
1437	ARC FURNACE	1	102.0	102.0	14	4.4	0.063
1118	PN DISC GRINDER	2	98.0	99.4	27	4.1	0.058
1336	SHELL MOLDER	1	94.0	94.0	27	3.8	0.055
1450	SHELL CURE	1	94.0	94.0	16	3.7	0.053
1507	CUT-OFF WHEEL	1	102.0	102.0	25	3.3	0.048
1494	SHAKEOUT TABLE	1	105.0	105.0	4	2.9	0.042
1493	BACK. ONLY CONTR.	0	98.0	98.0	10	2.8	0.040
1119	PN CONE GRINDER	3	95.7	97.2	7	2.8	0.039
1512	SWING GRINDER	1	93.0	93.0	3	2.6	0.038
1499	WHEELABRATOR	1	89.0	89.0	2	1.6	0.023
1491	SHAKEOUT CONVEYOR	1	98.0	98.0	8	1.6	0.022
1517	STAND STONE GRIND	1	91.0	91.0	2	1.5	0.022
1438	INDUCT. FURNACE	1	87.0	87.0	2	1.4	0.020
1337	HI-PRESS. MOLDER	1	92.0	92.0	3	1.2	0.017
1373	SANDMULLER	1	96.0	96.0	13	1.0	0.014
1511	BACK/ELEC GRINDER	1	88.0	88.0	5	0.7	0.011
1195	SPIRALBLAST	1	98.0	98.0	1	0.6	0.008
1395	BACK/EXHAUST FAN	1	87.0	87.0	23	0.5	0.008
1387	SANDSLINGER	1	98.0	98.0	2	0.2	0.003
1137	PN CHISEL	1	102.0	102.0	4	0.1	0.001
1146	PN TAMPER	1	90.0	90.0	2	0.1	0.001
1340	MOLDER-PACEMAKER	1	82.0	82.0	1	0.0	0.000

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ENVIRONMENTAL PROTECTION AGENCY                                    BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL          = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL = 90.0 DBA
                         EXCHANGE RATE            = 5 DBA

SIC CODE =  332                 PLANT NO. =  3               NO DATES SPECIFIED

EQUIP.       EQUIPMENT             NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION            UNITS     LD       LD     PERS.    INDEX      P.I.

 1160     ARC AIR GOUGERS            1     102.0    102.0       6       6.0     0.188
 1437     ARC FURNACE                1     102.0    102.0       5       4.1     0.128
 1118     PN DISC GRINDER            2      98.0     99.4       4       4.0     0.125
 1493     BACK. ONLY CONTR.          0      95.0     95.0      10       3.5     0.109
 1119     PN CONE GRINDER            3      95.7     97.2       3       3.0     0.094
 1512     SWING GRINDER              1      93.0     93.0       3       3.0     0.094
 1494     SHAKEOUT TABLE             1     105.0    105.0       4       2.5     0.079
 1507     CUT-OFF WHEEL              1     102.0    102.0       2       2.0     0.063
 1337     HI-PRESS. MOLDER           1      92.0     92.0       2       1.3     0.041
 1373     SANDMULLER                 1      96.0     96.0       1       0.9     0.027
 1491     SHAKEOUT CONVEYOR          1      98.0     98.0       3       0.6     0.02
 1195     SPIRALBLAST                1      98.0     98.0       1       0.6     0.018
 1387     SANDSLINGER                1      98.0     98.0       2       0.3     0.010
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ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO.   9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332   PLANT NO. = 3   NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1448	CORE OVEN	2	88.0	88.0	50	20.7	0.296
1103	PNEUMATIC GRINDER	6	96.0	97.5	40	11.9	0.171
1484	SHAKEOUT/DUMPOUT	2	101.5	101.5	22	7.3	0.105
1158	WELD/BURN/GOUGING	1	102.0	102.0	18	6.7	0.095
1434	FURNACE	2	94.5	94.5	16	5.8	0.083
1333	MOLDER	3	89.3	89.3	31	5.1	0.072
1510	ELECTRIC GRINDERS	3	90.7	90.7	10	4.9	0.070
1505	CUT-OFF WHEEL	1	102.0	102.0	25	3.3	0.048
1497	WHEELABRATOR	1	89.0	89.0	2	1.6	0.023
1371	MULLER	1	96.0	96.0	13	1.0	0.014
1187	ABRASIVE BLASTING	1	98.0	98.0	1	0.6	0.008
1394	EXHAUST FAN	2	90.0	90.0	23	0.5	0.008
1385	SANDSLINGER	1	98.0	98.0	2	0.2	0.003
1135	PNEUMATIC CHISEL	1	102.0	102.0	4	0.1	0.001
1144	PNEUMATIC TAMPER	1	90.0	90.0	2	0.1	0.001

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ENVIRONMENTAL PROTECTION AGENCY
                                                       BBN JOB NO.   9635
                 EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                     THRESHOLD LEVEL           = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE             = 5 DBA

SIC CODE =  332             PLANT NO. =  3             NO DATES SPECIFIED

EQUIP.      EQUIPMENT           NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE      DESCRIPTION          UNITS     LJ       LJ     PERS.    INDEX      P.I.

 1103   PNEUMATIC GRINDER         6      96.0     97.5      7        7.0     0.219
 1484   SHAKEOUT/DUMPOUT          2     101.5    101.5     17        6.6     0.208
 1158   WELD/BURN/GOUGING         1     102.0    102.0      6        6.0     0.188
 1434   FURNACE                   2      94.5     94.5      5        4.1     0.128
 1510   ELECTRIC GRINDERS         3      90.7     90.7      6        3.0     0.094
 1505   CUT-OFF WHEEL             1     102.0    102.0      2        2.0     0.063
 1333   MOLDER                    3      89.3     89.3      3        1.3     0.041
 1371   MULLER                    1      96.0     96.0      1        0.9     0.027
 1187   ABRASIVE BLASTING         1      98.0     98.0      1        0.6     0.018
 1385   SANDSLINGER               1      98.0     98.0      2        0.3     0.010
 1392   HYDRAULIC PUMP            1      96.0     96.0      2        0.2     0.00
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Plant No. 4

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT

                               EPA CRITERIA

SIC CODE =  332              PLANT NO. =  4              NO DATES SPECIFIED

  JOB      JOB DESCRIPTION        NO. OF   SOUND  LEVEL     LEV. WT. POP.
 CODE                             PERS.    MEAN   W.C.      MEAN    W.C.

42100      SHELL CORE OPERATOR      8      94.7   94.7       77      77
34000      SQUEZ/JOLT MOLDER OP     7      95.2   95.8       71      75
28000      WHEEL GRINDER OPER       5      98.4   98.4       68      68
44000      SHAKEOUT OPERATOR        8      89.4   89.4       41      41
28100      STAND STONE GRINDER      5      91.2   93.4       32      42
36800      MELTER/POURER            6      88.8   88.8       28      28
33900      AUTO-MOLDER OPERATOR     2      96.1   96.1       22      22
50500      CUT-OFF WHEEL OPER       2      96.1   96.8       22      23
40200      ROTOBLAST OPERATOR       2      89.3   92.1       10      14
38500      MULLER OPER              1      90.2   92.5        5       7
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ENVIRONMENTAL PROTECTION AGENCY
                                                             BBN JOB NO.    9635
                              PERSONNEL NOISE EXPOSURE AND IMPACT

                                THRESHOLD LEVEL          = 90.0 DBA
                                8-HR PERMISSIBLE LEVEL = 90.0 DBA
                                EXCHANGE RATE            = 5 DBA

  SIC CODE =  332                  PLANT NO. =  4              NO DATES SPECIFIED

   JOB       JOB DESCRIPTION          NO. OF     SOUND LEVEL     DAILY NOISE DOSE
  CODE                                PERS.      MEAN    W.C.     MEAN      W.C.

 28000       WHEEL GRINDER OPER         5        96.8    96.8     2.57      2.57
 33900       AUTO-MOLDER OPERATOR       2        95.4    95.4     2.11      2.11
 50500       CUT-OFF WHEEL OPER         2        94.9    95.6     1.98      2.18
 34000       SQUEZ/JOLT MOLDER OP       7        93.9    94.6     1.72      1.90
 42100       SHELL CORE OPERATOR        8        93.4    93.4     1.61      1.61
 26100       STAND STONE GRINDER        5        90.2    92.3     1.03      1.38
 38500       MULLER OPER                1       <90.0   <90.0     0.66      0.98
 40200       ROTOBLAST OPERATOR         2       <90.0    90.2     0.62      1.03
 44000       SHAKEOUT OPERATOR          8       <90.0   <90.0     0.57      0.57
 36800       MELTER/POURER              6       <90.0   <90.0     0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                                  BBN JOB NO.   9635

                      PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                                        EPA CRITERIA

SIC CODE =   332                 PLANT NO. =  4              NO DATES SPECIFIED

 JOB       JOB DESCRIPTION           NO. OF    SOUND   LEVEL      LEV. WT. POP.
CODE                                 PERS.      MEAN    W.C.       MEAN     W.C.

 421      SHELL CORE OPERATOR          8        94.7    94.7        77       77
 340      SQUEZ/JOLT MOLDER OP         7        95.2    95.8        71       75
 280      WHEEL GRINDER OPER           5        98.4    98.4        68       68
 440      SHAKEOUT OPERATOR            8        89.4    89.4        41       41
 281      STAND STONE GRINDER          5        91.2    93.4        32       42
 368      MELTER/POURER                6        88.8    88.8        28       28
 339      AUTO-MOLDER OPERATOR         2        96.1    95.1        22       22
 505      CUT-OFF WHEEL OPER           2        96.1    96.8        22       23
 402      ROTOBLAST OPERATOR           2        89.3    92.1        10       14
 385      MULLER OPER                  1        90.2    92.5         5        7


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TOTAL NUMBER OF PERSONNEL                                        46
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)                   46
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)                   46
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)                   30
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)                   32
LEVEL WEIGHTED POPULATION (MEAN)                                380.6
LEVEL WEIGHTED POPULATION (W.C.)                                402.9

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ENVIRONMENTAL PROTECTION AGENCY
                                                              BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                           THRESHOLD LEVEL           = 90.0 DBA
                           8-HR PERMISSIBLE LEVEL    = 90.0 DBA
                           EXCHANGE RATE             = 5 DBA

SIC CODE =  332              PLANT NO. =  4                NO DATES SPECIFIED

 JOB       JOB DESCRIPTION            NO. OF     SOUND LEVEL      DAILY NOISE DOSE
CODE                                  PERS.      MEAN    W.C.      MEAN     W.C.

 280       WHEEL GRINDER OPER           5        96.8    95.8      2.57     2.57
 339       AUTO-MOLDER OPERATOR         2        95.4    95.4      2.11     2.11
 505       CUT-OFF WHEEL OPER           2        94.9    95.6      1.98     2.18
 340       SQUEZ/JOLT MOLDER OP         7        93.9    94.6      1.72     1.90
 421       SHELL CORE OPERATOR          8        93.4    93.4      1.61     1.61
 281       STAND STONE GRINDER          5        90.2    92.3      1.03     1.38
 385       MULLER OPER                  1       <90.0   <90.0      0.66     0.98
 402       ROTOBLAST OPERATOR           2       <90.0    90.2      0.62     1.03
 440       SHAKEOUT OPERATOR            8       <90.0   <90.0      0.57     0.57
 368       MELTER/POURER                6       <90.0   <90.0      0.00     0.0



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                 TOTAL NUMBER OF PERSONNEL           =       46
                 TOTAL NUMBER OVEREXPOSED (MEAN)     =       29
                 TOTAL NUMBER OVEREXPOSED (W.C.)     =       31

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 4 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1450	SHELL CORE	1	96.0	96.0	54	9.2	0.199
1338	SQUEZ/JOLT MOLDER	2	96.5	97.2	22	7.5	0.163
1486	SHAKEOUT	1	91.0	91.0	8	5.7	0.124
1513	WHEEL GRINDER	1	102.0	102.0	5	4.6	0.099
1438	INDUCT. FURNACE	2	90.0	90.0	21	4.5	0.099
1517	STAND STONE GRIND	2	92.5	96.0	5	2.7	0.059
1374	MULLER	2	92.0	94.8	47	2.7	0.058
1117	PN DRILL GRINDER	1	91.0	91.0	10	2.3	0.050
1335	AUTO-MOLDER	1	97.0	97.0	2	2.0	0.042
1507	CUT-OFF WHEEL	2	97.5	98.2	2	1.9	0.042
1194	ROTOBLAST	2	91.5	93.6	2	1.6	0.036
1397	EXHAUST FAN	1	92.0	92.0	15	1.4	0.029

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ENVIRONMENTAL PROTECTION AGENCY
                                                            BBN JOB NO.   9635
                          EQUIPMENT NOISE CONTROL PRIORITY

                          THRESHOLD LEVEL          = 90.0 DBA
                          8-HR PERMISSIBLE LEVEL = 90.0 DBA
                          EXCHANGE RATE            = 5 DBA

SIC CODE = ' 332               PLANT NO. =  4              NO DATES SPECIFIED

EQUIP.        EQUIPMENT            NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE        DESCRIPTION           UNITS     LJ       LJ     PERS.    INDEX     P.I.

 1450     SHELL CORE                 1      96.0     96.0       8        8.0   0.276
 1338     SQUEZ/JOLT MOLDER          2      96.5     97.2       7        7.0   0.241
 1513     WHEEL GRINDER              1     102.0    102.0       5        4.1   0.142
 1117     PN DRILL GRINDER           1      91.0     91.0      10        3.1   0.108
 1517     STAND STONE GRIND          2      92.5     96.0       5        2.8   0.095
 1335     AUTO-MOLDER                1      97.0     97.0       2        2.0   0.069
 1507     CUT-OFF WHEEL              2      97.5     98.2       2        2.0   0.069
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ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO.   9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332   PLANT NO. = 4   NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1333	MOLDER	3	96.7	97.4	24	9.4	0.205
1448	CORE OVEN	2	89.5	89.5	54	9.2	0.199
1510	ELECTRIC GRINDERS	3	95.7	99.2	10	7.3	0.158
1484	SHAKEOUT/DUMPOUT	1	91.0	91.0	8	5.7	0.124
1434	FURNACE	3	89.0	89.0	21	4.5	0.099
1371	MULLER	2	92.0	94.8	47	2.7	0.058
1103	PNEUMATIC GRINDER	1	91.0	91.0	10	2.3	0.050
1505	CUT-OFF WHEEL	2	97.5	98.2	2	1.9	0.042
1187	ABRASIVE BLASTING	2	91.5	93.6	2	1.6	0.036
1394	EXHAUST FAN	1	92.0	92.0	15	1.4	0.029

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ENVIRONMENTAL PROTECTION AGENCY                             BBN JOB NO.   9635

                EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                    THRESHOLD LEVEL          = 90.0 DBA
                    8-HR PERMISSIBLE LEVEL = 90.0 DBA
                    EXCHANGE RATE            = 5 DBA

SIC CODE =  332              PLANT NO. =  4              NO DATES SPECIFIED

EQUIP.       EQUIPMENT            NO.OF    MEAN     M.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION           UNITS     LJ       LJ    PERS.    INDEX     P.I.

 1333    MOLDER                      3     96.7     97.4      9        9.0   0.310
 1448    CORE OVEN                   2     89.5     89.5      8        8.0   0.276
 1510    ELECTRIC GRINDERS           3     95.7     99.2     10        6.9   0.237
 1103    PNEUMATIC GRINDER           1     91.0     91.0     10        3.1   0.106
 1505    CUT-OFF WHEEL               2     97.5     98.2      2        2.0   0.069
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Plant No. 5

ENVIRONMENTAL PROTECTION AGENCY   BBN JOB NO.   9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332   PLANT NO. = 5   NO DATES SPECIFIED

JOB	JOB DESCRIPTION	NO. OF	SOUND	LEVEL	LEV. WT.	POP.
CODE		PERS.	MEAN	W.C.	MEAN	W.C.
27500	PN GRINDER OPER	62	93.6	95.0	536	685
30303	ARC WELDER/A	10	99.6	103.7	151	206
30300	ARC WELDER/A	10	97.9	102.0	131	182
31002	ARC AIR GOUGER	4	106.2	110.4	97	125
34300	MOLDMASTER OPERATOR	6	98.1	100.1	80	94
44300	SHAKEOUT TABLE OPER	4	98.9	101.7	57	71
32600	ARC FURNACE OPERATOR	4	98.0	102.9	53	77
31003	ARC AIR GOUGER	2	106.8	111.0	50	64
31001	ARC AIR GOUGER	2	106.2	110.4	48	62
31800	GAS BURNER	2	105.9	110.1	47	61
31900	POWDER BURNER	2	105.9	110.1	47	61
34102	FLOOR MOLDER	4	96.4	97.7	45	51
34103	FLOOR MOLDER	4	96.1	97.4	44	50
31000	ARC AIR GOUGER	2	104.8	108.9	44	57
28100	STAND STONE GRINDER	10	88.3	88.3	44	44
36700	POURER	8	87.7	87.7	32	32
27900	SWING GRINDER OPER	4	92.8	92.8	31	31
50500	CUT-OFF WHEEL OPER	2	99.1	99.1	28	28
26406	SERVICEMAN	4	91.4	94.4	26	37
26402	SERVICEMAN	4	91.0	91.0	25	25
40400	MACHINE BLASTER	4	91.0	91.0	25	25
33001	LADLE PRE-HEATER	2	97.6	108.4	25	55
26600	HELPER	6	87.9	87.9	24	24
50600	TABOR CUT-OFF SAW OP	2	94.1	94.1	18	18
40201	ROTOBLAST OPERATOR	2	93.8	97.4	17	24
34101	FLOOR MOLDER	4	88.3	88.3	17	17
40200	ROTOBLAST OPERATOR	2	93.4	96.9	16	23
40300	HAND BLASTER	2	92.3	92.3	15	15
46700	WHELLABRATOR OPER	4	87.1	89.1	14	19
20300	WORKSAVER OPERATOR	6	84.8	84.8	14	14
20202	FORKLIFT OPERATOR	2	91.4	93.9	13	17
48000	OVERHEAD CRANE OPER	2	90.0	90.0	11	11
48002	OVERHEAD CRANE OPER	2	89.0	89.0	9	9
53400	PRESS OPERATOR	6	83.0	84.0	9	12
33100	LADLE SKIMMER	2	88.8	88.8	9	9
48001	OVERHEAD CRANE OPER	2	88.4	88.4	9	9
30301	ARC WELDER/A	4	84.1	84.1	8	8
20200	FORKLIFT OPERATOR	2	87.0	87.0	7	7
33000	LADLE PRE-HEATER	2	86.9	86.9	7	7
48003	OVERHEAD CRANE OPER	2	86.8	86.8	6	6

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	LEV. WT. POP. MEAN	LEV. WT. POP. W.C.
26501	LABORER	2	86.8	86.8	6	6
26404	SERVICEMAN	2	86.1	90.5	6	11
26405	SERVICEMAN	2	86.0	86.0	6	6
26410	SERVICEMAN	2	86.0	88.6	6	9
26500	LABORER	2	86.0	88.6	6	9
33002	LADLE PRE-HEATER	2	86.0	88.6	6	9
34100	FLOOR MOLDER	2	86.0	88.6	6	9
33101	LADLE SKIMMER	2	85.5	88.5	5	9
30302	ARC WELDER/A	2	85.1	85.1	5	5
26401	SERVICEMAN	2	84.7	84.7	4	4
26400	SERVICEMAN	2	84.1	84.1	4	4
26409	SERVICEMAN	4	81.4	83.6	4	7
26407	SERVICEMAN	2	83.5	87.6	3	7
46100	INSPECTOR	2	83.0	83.0	3	3
26403	SERVICEMAN	2	82.8	84.3	3	4
26408	SERVICEMAN	2	82.0	82.0	2	2
20201	FORKLIFT OPERATOR	2	76.0	78.6	0	0
26502	LABORER	2	<75.0	<75.0	0	0

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                    PERSONNEL NOISE EXPOSURE AND IMPACT

                     THRESHOLD LEVEL         = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE           = 5 DBA

SIC CODE =  332            PLANT NO. =  5            NO DATES SPECIFIED

 JOB       JOB DESCRIPTION        NO. OF     SOUND LEVEL     DAILY NOISE DOSE
CODE                              PERS.      MEAN   W.C.      MEAN      W.C.

31003      ARC AIR GOUGER            2      106.1  110.3      9.37     16.76
31001      ARC AIR GOUGER            2      105.2  109.4      8.20     14.66
31002      ARC AIR GOUGER            4      105.2  109.4      8.20     14.66
31800      GAS BURNER                2      104.6  108.8      7.61     13.62
31900      POWDER BURNER             2      104.6  108.8      7.61     13.62
31000      ARC AIR GOUGER            2      102.8  106.9      5.86     10.47
44300      SHAKEOUT TABLE OPER       4       98.6  101.2      3.29      4.73
50500      CUT-OFF WHEEL OPER        2       98.4   98.4      3.20      3.20
32600      ARC FURNACE OPERATOR      4       96.9  101.9      2.61      5.19
34300      MOLDMASTER OPERATOR       6       96.9   98.7      2.61      3.32
30303      ARC WELDER/A             10       94.1   98.3      1.76      3.14
34102      FLOOR MOLDER              4       93.9   95.1      1.72      2.02
50600      TABOR CUT-OFF SAW OP      2       93.4   93.4      1.60      1.60
40201      ROTOBLAST OPERATOR        2       93.3   96.9      1.59      2.59
33001      LADLE PRE-HEATER          2       92.7  103.7      1.46      6.72
40200      ROTOBLAST OPERATOR        2       92.4   95.0      1.40      2.28
34103      FLOOR MOLDER              4       92.3   93.7      1.38      1.68
27900      SWING GRINDER OPER        4       92.1   92.1      1.34      1.34
27500      PN GRINDER OPER          62       91.6   93.6      1.24      1.65
30300      ARC WELDER/A             10       91.1   95.3      1.17      2.09
40300      HAND BLASTER              2       90.0   90.0      1.00      1.00
26402      SERVICEMAN                4      <90.0  <90.0      0.99      0.99
40400      MACHINE BLASTER           4      <90.0  <90.0      0.99      0.99
26406      SERVICEMAN                4      <90.0   91.4      0.75      1.22
33100      LADLE SKIMMER             2      <90.0  <90.0      0.57      0.57
20202      FORKLIFT OPERATOR         2      <90.0  <90.0      0.46      0.66
20200      FORKLIFT OPERATOR         2      <90.0  <90.0      0.34      0.34
36700      POURER                    8      <90.0  <90.0      0.34      0.34
34101      FLOOR MOLDER              4      <90.0  <90.0      0.17      0.17
26501      LABORER                   2      <90.0  <90.0      0.11      0.11
33000      LADLE PRE-HEATER          2      <90.0  <90.0      0.11      0.11
48002      OVERHEAD CRANE OPER       2      <90.0  <90.0      0.11      0.11
26600      HELPER                    6      <90.0  <90.0      0.11      0.11
20201      FORKLIFT OPERATOR         2      <90.0  <90.0      0.00      0.0
20300      WORKSAVER OPERATOR        6      <90.0  <90.0      0.00      0.0
26400      SERVICEMAN                2      <90.0  <90.0      0.00      0.0
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ENVIRONMENTAL PROTECTION AGENCY                           BBN JOB NO.   9635

                     PERSONNEL NOISE EXPOSURE AND IMPACT

                      THRESHOLD LEVEL         = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE           = 5 DBA

SIC CODE =  332             PLANT NO. =  5            NO DATES SPECIFIED

  JOB      JOB DESCRIPTION          NO. OF     SOUND LEVEL     DAILY NOISE DOSE
 CODE                               PERS.      MEAN    W.C.     MEAN     W.C.

26401      SERVICEMAN                   2     <90.0   <90.0     0.00     0.0
26403      SERVICEMAN                   2     <90.0   <90.0     0.00     0.0
26404      SERVICEMAN                   2     <90.0   <90.0     0.00     0.83
26405      SERVICEMAN                   2     <90.0   <90.0     0.00     0.0
26407      SERVICEMAN                   2     <90.0   <90.0     0.00     0.42
26408      SERVICEMAN                   2     <90.0   <90.0     0.00     0.0
26409      SERVICEMAN                   4     <90.0   <90.0     0.00     0.0
26410      SERVICEMAN                   2     <90.0   <90.0     0.00     0.0
26500      LABORER                      2     <90.0   <90.0     0.00     0.0
26502      LABORER                      2     <90.0   <90.0     0.00     0.0
28100      STAND STONE GRINDER         10     <90.0   <90.0     0.00     0.0
30301      ARC WELDER/A                 4     <90.0   <90.0     0.00     0.0
30302      ARC WELDER/A                 2     <90.0   <90.0     0.00     0.0
33002      LADLE PRE-HEATER             2     <90.0   <90.0     0.00     0.0
33101      LADLE SKIMMER                2     <90.0   <90.0     0.00     0.42
34100      FLOOR MOLDER                 2     <90.0   <90.0     0.00     0.0
46100      INSPECTOR                    2     <90.0   <90.0     0.00     0.0
46700      WHELLABRATOR OPER            4     <90.0   <90.0     0.00     0.0
48000      OVERHEAD CRANE OPER          2     <90.0   <90.0     0.00     0.0
48001      OVERHEAD CRANE OPER          2     <90.0   <90.0     0.00     0.0
48003      OVERHEAD CRANE OPER          2     <90.0   <90.0     0.00     0.0
53400      PRESS OPERATOR               6     <90.0   <90.0     0.00     0.0
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
275	PN GRINDER OPER	62	93.6	96.0	536	685
303	ARC WELDER/A	26	95.5	98.6	296	402
310	ARC AIR GOUGER	10	106.0	110.2	240	310
341	FLOOR MOLDER	14	92.5	93.6	113	128
264	SERVICEMAN	28	85.9	87.6	92	122
343	MOLDMASTER OPERATOR	6	98.1	100.1	80	94
443	SHAKEOUT TABLE OPER	4	98.9	101.7	57	71
326	ARC FURNACE OPERATOR	4	98.0	102.9	53	77
318	GAS BURNER	2	105.9	110.1	47	61
319	POWDER BURNER	2	105.9	110.1	47	61
281	STAND STONE GRINDER	10	88.3	88.3	44	44
330	LADLE PRE-HEATER	6	90.1	94.6	38	71
480	OVERHEAD CRANE OPER	8	88.6	88.6	37	37
402	ROTOBLAST OPERATOR	4	93.6	97.1	34	48
367	POURER	8	87.7	87.7	32	32
279	SWING GRINDER OPER	4	92.8	92.8	31	31
505	CUT-OFF WHEEL OPER	2	99.1	99.1	28	28
404	MACHINE BLASTER	4	91.0	91.0	25	25
266	HELPER	6	87.9	87.9	24	24
202	FORKLIFT OPERATOR	6	84.8	86.5	20	25
506	TABOR CUT-OFF SAW OP	2	94.1	94.1	18	18
331	LADLE SKIMMER	4	87.2	88.7	15	18
403	HAND BLASTER	2	92.3	92.3	15	15
467	WHELLABRATOR OPER	4	87.1	89.1	14	19
203	WORKSAVER OPERATOR	6	84.8	84.8	14	14
265	LABORER	6	79.3	80.1	12	16
534	PRESS OPERATOR	6	83.0	84.0	9	12
461	INSPECTOR	2	83.0	83.0	3	3

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ENVIRONMENTAL PROTECTION AGENCY                              BBN JOB NO.   9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                              EPA CRITERIA

SIC CODE =  332             PLANT NO. =  5            NO DATES SPECIFIED




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TOTAL NUMBER OF PERSONNEL                                   248
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)              246
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)              246
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)              148
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)              150
LEVEL WEIGHTED POPULATION (MEAN)                           1988.5
LEVEL WEIGHTED POPULATION (W.C.)                           2504.2

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL MEAN	SOUND LEVEL W.C.	DAILY NOISE DOSE MEAN	DAILY NOISE DOSE W.C.
310	ARC AIR GOUGER	10	105.0	109.2	7.96	14.24
318	GAS BURNER	2	104.6	108.8	7.61	13.62
319	POWDER BURNER	2	104.6	108.8	7.61	13.62
443	SHAKEOUT TABLE OPER	4	98.6	101.2	3.29	4.73
505	CUT-OFF WHEEL OPER	2	98.4	98.4	3.20	3.20
326	ARC FURNACE OPERATOR	4	96.9	101.9	2.61	5.19
343	MOLDMASTER OPERATOR	6	96.9	98.7	2.61	3.32
506	TABOR CUT-OFF SAW OP	2	93.4	93.4	1.60	1.60
402	ROTOBLAST OPERATOR	4	92.9	96.4	1.49	2.44
279	SWING GRINDER OPER	4	92.1	92.1	1.34	1.34
275	PN GRINDER OPER	62	91.6	93.6	1.24	1.65
303	ARC WELDER/A	26	90.9	95.1	1.13	2.01
403	HAND BLASTER	2	90.0	90.0	1.00	1.00
404	MACHINE BLASTER	4	<90.0	<90.0	0.99	0.99
341	FLOOR MOLDER	14	<90.0	90.7	0.94	1.11
330	LADLE PRE-HEATER	6	<90.0	95.9	0.52	2.28
367	POURER	8	<90.0	<90.0	0.34	0.34
331	LADLE SKIMMER	4	<90.0	<90.0	0.29	0.50
202	FORKLIFT OPERATOR	6	<90.0	<90.0	0.27	0.34
264	SERVICEMAN	28	<90.0	<90.0	0.25	0.40
266	HELPER	6	<90.0	<90.0	0.11	0.11
265	LABORER	6	<90.0	<90.0	0.04	0.04
480	OVERHEAD CRANE OPER	8	<90.0	<90.0	0.03	0.03
203	WORKSAVER OPERATOR	6	<90.0	<90.0	0.00	0.0
281	STAND STONE GRINDER	10	<90.0	<90.0	0.00	0.0
461	INSPECTOR	2	<90.0	<90.0	0.00	0.0
467	WHELLABRATOR OPER	4	<90.0	<90.0	0.00	0.0
534	PRESS OPERATOR	6	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY                            BBN JOB NO.    9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                 THRESHOLD LEVEL         = 90.0 DBA
                 8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                 EXCHANGE RATE           = 5 DBA

SIC CODE =  332            PLANT NO. =  5            NO DATES SPECIFIED




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               TOTAL NUMBER OF PERSONNEL        =     246
               TOTAL NUMBER OVEREXPOSED (MEAN)  =     132
               TOTAL NUMBER OVEREXPOSED (W.C.)  =     136

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	H.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1160	ARC AIR GOUGERS	4	107.8	111.9	236	39.5	0.161
1118	PN DISC GRINDER	3	99.0	102.6	238	28.5	0.116
1120	PN WHEEL GRINDER	8	95.3	98.8	240	19.3	0.079
1492	SHAKEOUT TABLE	2	100.0	102.8	40	12.6	0.051
1517	STAND STONE GRIND	1	89.0	89.0	154	11.6	0.047
1437	ARC FURNACE	2	99.5	104.4	44	11.0	0.045
1117	PN DRILL GRINDER	4	94.0	95.8	238	10.8	0.044
1387	SANDSLINGER	1	98.0	98.0	60	10.7	0.044
1119	PN CONE GRINDER	4	93.5	94.8	238	10.5	0.042
1194	ROTOBLAST	2	94.5	98.0	32	9.1	0.037
1159	BACK/WLD/BRN/GOUG	1	87.8	87.8	36	8.8	0.036
1193	ABRASIVE BLAST	1	92.0	92.0	8	7.5	0.030
1146	PN TAMPER	2	101.0	102.4	8	7.2	0.029
1499	WHEELABRATOR	2	87.5	89.6	30	6.2	0.025
1471	BACK/OVERHD CRANE	1	90.0	90.0	12	6.0	0.024
1341	MOLDMASTER	3	101.0	103.6	8	5.9	0.024
1535	VENTILATION	1	83.0	83.0	34	5.1	0.021
1512	SWING GRINDER	1	93.7	93.7	146	5.0	0.020
1166	WELDING/ARC	1	83.0	83.0	168	4.8	0.019
1443	LADLE PRE-HEAT	3	89.3	94.5	40	4.7	0.019
1508	CUT-OFF WHEEL	1	100.0	100.0	144	4.2	0.017
1438	INDUCT. FURNACE	1	86.0	86.0	74	2.6	0.011
1442	FURNACE	1	86.0	86.0	40	2.4	0.010
1509	TABOR CUT-OFF WHL	1	95.0	95.0	2	2.0	0.008
1137	PN CHISEL	3	104.3	115.3	2	1.9	0.008
1375	SAND HOPPER/VIB	5	97.6	100.1	6	1.9	0.008
1189	ABRASIVE BLAST	1	95.0	95.0	2	1.8	0.008
1336	SHELL MOLDER	2	93.5	97.0	40	1.8	0.007
1482	PN VIBRATOR	1	96.0	96.0	40	0.9	0.004
1542	COMPRESSED AIR	3	95.3	103.8	2	0.6	0.002

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                         EQUIPMENT NOISE IMPACT

                              EPA CRITERIA

SIC CODE =  332             PLANT NO. =  5               NO DATES SPECIFIED

EQUIP.        EQUIPMENT         NO.OF    MEAN    W.C.    NO.OF   PRIORITY  NORM.
 CODE        DESCRIPTION        UNITS     LJ      LJ     PERS.    INDEX     P.I.

 1802     FORKLIFT                 1     83.0    83.0       2       0.2    0.001
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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                 EQUIPMENT NOISE CONTROL PRIORITY

                 THRESHOLD LEVEL        = 90.0 DBA
                 8-HR PERMISSIBLE LEVEL = 90.0 DBA
                 EXCHANGE RATE          = 5 DBA

SIC CODE =  332          PLANT NO. =  5           NO DATES SPECIFIED

EQUIP.       EQUIPMENT         NO.OF   MEAN    W.C.   NO.OF  PRIORITY  NORM.
 CODE       DESCRIPTION        UNITS    LJ      LJ    PERS.   INDEX    P.I.

 1160   ARC AIR GOUGERS          4    107.8   111.9     42      34.3   0.260
 1118   PN DISC GRINDER          3     99.0   102.6     62      21.6   0.163
 1120   PN WHEEL GRINDER         8     95.3    98.8     62      18.8   0.143
 1119   PN CONE GRINDER          4     93.5    94.8     62      10.8   0.082
 1117   PN DRILL GRINDER         4     94.0    95.8     62      10.8   0.082
 1146   PN TAMPER                2    101.0   102.4      8       7.2   0.055
 1492   SHAKEOUT TABLE           2    100.0   102.8     12       4.5   0.034
 1194   ROTOBLAST                2     94.5    98.0      4       4.0   0.030
 1437   ARC FURNACE              2     99.5   104.4      4       4.0   0.030
 1512   SWING GRINDER            1     93.7    93.7      4       4.0   0.030
 1341   MOLDMASTER               3    101.0   103.6      6       3.7   0.028
 1375   SAND HOPPER/VIB          5     97.6   100.1      6       2.3   0.017
 1137   PN CHISEL                3    104.3   115.3      2       2.0   0.015
 1508   CUT-OFF WHEEL            1    100.0   100.0      2       2.0   0.015
 1509   TABOR CUT-OFF WHL        1     95.0    95.0      2       2.0   0.015
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1103	PNEUMATIC GRINDER	19	95.2	98.1	954	69.0	0.281
1158	WELD/BURN/GOUGING	6	100.3	104.5	440	53.0	0.216
1434	FURNACE	7	91.3	96.4	198	20.6	0.084
1187	ABRASIVE BLASTING	4	94.0	97.5	42	18.5	0.075
1510	ELECTRIC GRINDERS	2	91.3	91.3	300	16.6	0.067
1484	SHAKEOUT/DUMPOUT	2	100.0	102.8	40	12.6	0.051
1385	SANDSLINGER	1	98.0	98.0	60	10.7	0.044
1333	MOLDER	8	102.7	107.8	48	7.7	0.031
1144	PNEUMATIC TAMPER	2	101.0	102.4	8	7.2	0.029
1497	WHEELABRATOR	2	87.5	89.6	30	6.2	0.025
1505	CUT-OFF WHEEL	2	97.5	97.5	146	6.1	0.025
1460	LATHE	2	92.0	92.0	12	6.0	0.024
1135	PNEUMATIC CHISEL	3	104.3	115.3	2	1.9	0.[illegible]8
1371	MULLER	5	97.6	100.1	6	1.9	0.008
1480	PNEUMATIC VIBRATOR	1	96.0	96.0	40	0.9	0.004

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

            EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                THRESHOLD LEVEL          = 90.0 DBA
                8-HR PERMISSIBLE LEVEL = 90.0 DBA
                EXCHANGE RATE            = 5 DBA

SIC CODE =   332             PLANT NO. =  5             NO DATES SPECIFIED

EQUIP.       EQUIPMENT           NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION          UNITS     LJ       LJ    PERS.    INDEX     P.I.

 1103    PNEUMATIC GRINDER        19      95.2     98.1    248      62.0    0.470
 1158    WELD/BURN/GOUGING         6     100.3    104.5     76      34.3    0.260
 1144    PNEUMATIC TAMPER          2     101.0    102.4      8       7.2    0.055
 1484    SHAKEOUT/DUMPOUT          2     100.0    102.8     12       4.5    0.034
 1434    FURNACE                   7      91.3     96.4      4       4.0    0.030
 1187    ABRASIVE BLASTING         4      94.0     97.5      4       4.0    0.030
 1510    ELECTRIC GRINDERS         2      91.3     91.3      6       4.0    0.030
 1505    CUT-OFF WHEEL             2      97.5     97.5      4       4.0    0.030
 1333    MOLDER                    8     102.7    107.8      6       3.7    0.028
 1371    MULLER                    5      97.6    100.1      6       2.3    0.017
 1135    PNEUMATIC CHISEL          3     104.3    115.3      2       2.0    0.015
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Plant No. 6

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND MEAN	LEVEL W.C.	LEV. WT. MEAN	POP. W.C.
27501	PN GRINDER OPER	3	93.3	94.4	25	28
34000	SQUEZ/JOLT MOLDER OP	5	87.8	87.8	20	20
42900	OIL-BAKE COREMAKER	2	88.3	88.3	8	8
27500	PN GRINDER OPER	1	89.3	90.7	5	6
40200	ROTOBLAST OPERATOR	1	89.2	89.2	5	5
32900	CUPOLA FURNACE OPER	2	84.7	84.7	4	4
30700	ACETYLENE WELDER	1	85.7	85.7	2	2
27000	FOREMAN	1	84.3	84.3	2	2
34100	FLOOR MOLDER	4	77.3	77.3	0	0
38500	MULLER OPER	1	77.3	77.3	0	0
42200	NO-BAKE CORE OPER	1	76.0	80.2	0	0
42201	NO-BAKE CORE OPER	1	<75.0	78.2	0	0

ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 332 PLANT NO. = 6 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL		DAILY NOISE DOSE	
			MEAN	W.C.	MEAN	W.C.
27501	PN GRINDER OPER	3	90.6	91.9	1.09	1.30
27500	PN GRINDER OPER	1	<90.0	<90.0	0.52	0.70
40200	ROTOBLAST OPERATOR	1	<90.0	<90.0	0.35	0.35
34000	SQUEZ/JOLT MOLDER OP	5	<90.0	<90.0	0.31	0.31
42900	OIL-BAKE COREMAKER	2	<90.0	<90.0	0.16	0.16
27000	FOREMAN	1	<90.0	<90.0	0.00	0.0
30700	ACETYLENE WELDER	1	<90.0	<90.0	0.00	0.0
32900	CUPOLA FURNACE OPER	2	<90.0	<90.0	0.00	0.0
34100	FLOOR MOLDER	4	<90.0	<90.0	0.00	0.0
38500	MULLER OPER	1	<90.0	<90.0	0.00	0.0
42200	NO-BAKE CORE OPER	1	<90.0	<90.0	0.00	0.0
42201	NO-BAKE CORE OPER	1	<90.0	<90.0	0.00	0.0

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ENVIRONMENTAL PROTECTION AGENCY                           BBN JOB NO.   9635

                PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                               EPA CRITERIA

SIC CODE =  332            PLANT NO. =  6           NO DATES SPECIFIED

 JOB       JOB DESCRIPTION        NO. OF    SOUND  LEVEL     LEV. WT. POP.
CODE                              PERS.      MEAN   W.C.      MEAN    W.C.

 275       PN GRINDER OPER          4        92.3   93.5       30      34
 340       SQUEZ/JOLT MOLDER OP     5        87.8   87.8       20      20
 429       OIL-BAKE COREMAKER       2        88.3   88.3        8       8
 402       ROTOBLAST OPERATOR       1        89.2   89.2        5       5
 329       CUPOLA FURNACE OPER      2        84.7   84.7        4       4
 307       ACETYLENE WELDER         1        85.7   85.7        2       2
 270       FOREMAN                  1        84.3   84.3        2       2
 341       FLOOR MOLDER             4        77.3   77.3        0       0
 385       MULLER OPER              1        77.3   77.3        0       0
 422       NO-BAKE CORE OPER        2       <75.0   79.2        0       0




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TOTAL NUMBER OF PERSONNEL                                 23
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)            22
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)            23
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)             3
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)             4
LEVEL WEIGHTED POPULATION (MEAN)                          75.0
LEVEL WEIGHTED POPULATION (W.C.)                          80.2

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

               PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                     THRESHOLD LEVEL          = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE            = 5 DBA

SIC CODE =  332            PLANT NO. =  5            NO DATES SPECIFIED

 JOB      JOB DESCRIPTION         NO. OF     SOUND LEVEL     DAILY NOISE DOSE
CODE                              PERS.      MEAN    W.C.     MEAN     W.C.

 275      PN GRINDER OPER            4      <90.0    91.0     0.95     1.15
 402      ROTOBLAST OPERATOR         1      <90.0   <90.0     0.35     0.35
 340      SQUEZ/JOLT MOLDER OP       5      <90.0   <90.0     0.31     0.31
 429      OIL-BAKE COREMAKER         2      <90.0   <90.0     0.16     0.16
 270      FOREMAN                    1      <90.0   <90.0     0.00     0.0
 307      ACETYLENE WELDER           1      <90.0   <90.0     0.00     0.0
 329      CUPOLA FURNACE OPER        2      <90.0   <90.0     0.00     0.0
 341      FLOOR MOLDER               4      <90.0   <90.0     0.00     0.0
 385      MULLER OPER                1      <90.0   <90.0     0.00     0.0
 422      NO-BAKE CORE OPER          2      <90.0   <90.0     0.00     0.0




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                 TOTAL NUMBER OF PERSONNEL           =      23
                 TOTAL NUMBER OVEREXPOSED (MEAN) =       3
                 TOTAL NUMBER OVEREXPOSED (W.C.) =       3

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 6 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO. OF PERS.	PRIORITY INDEX	NORM. P.I.
1440	FURNACE	1	86.0	86.0	30	6.7	0.303
1120	PN WHEEL GRINDER	6	95.8	97.6	10	3.5	0.158
1482	PN VIBRATOR	1	98.0	98.0	5	2.1	0.095
1146	PN TAMPER	3	92.3	92.9	15	1.9	0.088
1483	PN VIBRATOR	1	105.0	105.0	2	1.9	0.086
1338	SQUEZ/JOLT MOLDER	4	97.0	101.5	5	1.7	0.076
1517	STAND STONE GRIND	3	90.3	92.4	8	1.2	0.053
1194	ROTOBLAST	1	92.0	92.0	8	0.8	0.037
1552	BACK. ONLY CONTR.	3	74.1	78.4	4	0.8	0.036
1119	PN CONE GRINDER	2	95.0	95.0	3	0.7	0.030
1175	WELD/ACETYLENE	1	86.0	86.0	2	0.3	0.014
1542	BACK. ONLY CONTR.	1	69.0	73.3	5	0.3	0.013
1499	WHEELABRATOR	1	90.2	90.2	1	0.2	0.009
1373	SANDMULLER	1	75.0	75.0	1	0.1	0.003

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ENVIRONMENTAL PROTECTION AGENCY                         BBN JOB NO.   9635

                     EQUIPMENT NOISE CONTROL PRIORITY

                     THRESHOLD LEVEL         = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                     EXCHANGE RATE           = 5 DBA

SIC CODE =  332             PLANT NO. =  5            NO DATES SPECIFIED

EQUIP.       EQUIPMENT          NO.OF    MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION         UNITS     LD       LD    PERS.    INDEX     P.I.

 1120    PN WHEEL GRINDER          6     95.6     97.6      3        2.2   0.724
 1119    PN CONE GRINDER           2     95.0     95.0      3        0.8   0.276
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 5 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1434	FURNACE	1	86.0	86.0	30	6.7	0.303
1103	PNEUMATIC GRINDER	8	95.6	97.2	13	4.1	0.189
1480	PNEUMATIC VIBRATOR	2	101.5	101.5	7	4.0	0.181
1144	PNEUMATIC TAMPER	3	92.3	92.9	15	1.9	0.088
1333	MOLDER	5	95.8	100.3	5	1.7	0.076
1510	ELECTRIC GRINDERS	3	90.3	92.4	8	1.2	0.053
1187	ABRASIVE BLASTING	1	92.0	92.0	8	0.8	0.037
1158	WELD/BURN/GOUGING	1	86.0	86.0	2	0.3	0.014
1497	WHEELABRATOR	1	90.2	90.2	1	0.2	0.009
1371	MULLER	1	75.0	75.0	1	0.1	0.003

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ENVIRONMENTAL PROTECTION AGENCY                        BBN JOB NO.   9635

                 EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                      THRESHOLD LEVEL         = 90.0 DBA
                      8-HR PERMISSIBLE LEVEL = 90.0 DBA
                      EXCHANGE RATE           = 5 DBA

SIC CODE =  332            PLANT NO. =  6            NO DATES SPECIFIED

EQUIP.      EQUIPMENT          NO.OF    MEAN     W.C.   NO.OF  PRIORITY  NORM.
 CODE      DESCRIPTION         UNITS     LJ       LJ    PERS.   INDEX    P.I.

 1103   PNEUMATIC GRINDER         8     95.5     97.2      6       3.0  1.000
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Plant No. 7

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ENVIRONMENTAL PROTECTION AGENCY                        BBN JOB NO.   9635

                   PERSONNEL NOISE EXPOSURE AND IMPACT

                              EPA CRITERIA

SIC CODE =  332              PLANT NO. =  7           NO DATES SPECIFIED

  JOB        JOB DESCRIPTION       NO. OF    SOUND  LEVEL      LEV. WT. POP.
 CODE                              PERS.      MEAN   W.C.       MEAN    W.C.

27500      PN GRINDER OPER           10       94.6   96.1        95     111
31000      ARC AIR GOUGER             2      103.8  106.6        41      50
50500      CUT-OFF WHEEL OPER         3       98.0   98.0        39      39
43300      CORE ROOM WORKER           7       87.8   88.6        28      32
26501      LABORER                    6       87.5   89.9        23      33
42200      NO-BAKE CORE OPER          5       87.4   87.4        19      19
28100      STAND STONE GRINDER        2       94.4   94.4        18      18
36800      MELTER/POURER              3       90.7   95.7        18      32
34001      SQUEZ/JOLT MOLDER OP       3       90.5   93.3        17      25
34000      SQUEZ/JOLT MOLDER OP       2       93.1   95.5        16      21
46700      WHELLABRATOR OPER          3       88.0   88.4        12      13
30300      ARC WELDER/A               3       87.0   87.2        10      11
27900      SWING GRINDER OPER         1       92.7   92.7         7       7
26500      LABORER                    1       90.3   90.3         5       5
42100      SHELL CORE OPERATOR        1       87.5   88.6         3       4
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

PERSONNEL NOISE EXPOSURE AND IMPACT

THRESHOLD LEVEL = 90.0 DBA
8-HR PERMISSIBLE LEVEL = 90.0 DBA
EXCHANGE RATE = 5 DBA

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIED

JOB CODE	JOB DESCRIPTION	NO. OF PERS.	SOUND LEVEL		DAILY NOISE DOSE	
			MEAN	W.C.	MEAN	W.C.
31000	ARC AIR GOUGER	2	102.3	105.1	5.51	8.16
50500	CUT-OFF WHEEL OPER	3	96.3	96.3	2.40	2.40
27500	PN GRINDER OPER	10	92.5	94.0	1.42	1.75
28100	STAND STONE GRINDER	2	92.3	92.3	1.38	1.38
27900	SWING GRINDER OPER	1	90.3	90.3	1.04	1.04
34000	SQUEZ/JOLT MOLDER OP	2	<90.0	91.5	0.90	1.24
36800	MELTER/POURER	3	<90.0	94.0	0.79	1.73
26500	LABORER	1	<90.0	<90.0	0.66	0.66
34001	SQUEZ/JOLT MOLDER OP	3	<90.0	<90.0	0.35	0.58
26501	LABORER	6	<90.0	<90.0	0.13	0.29
30300	ARC WELDER/A	3	<90.0	<90.0	0.11	0.12
42200	NO-BAKE CORE OPER	5	<90.0	<90.0	0.05	0.05
42100	SHELL CORE OPERATOR	1	<90.0	<90.0	0.00	0.51
43300	CORE ROOM WORKER	7	<90.0	<90.0	0.00	0.41
46700	WHEELABRATOR OPER	3	<90.0	<90.0	0.00	0.41

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ENVIRONMENTAL PROTECTION AGENCY                        BBN JOB NO.   9635

            PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                            EPA CRITERIA

SIC CODE =  332            PLANT NO. =  7          NO DATES SPECIFIED

 JOB       JOB DESCRIPTION        NO. OF    SOUND  LEVEL     LEV. WT. POP.
CODE                              PERS.     MEAN   W.C.       MEAN    W.C.

 275     PN GRINDER OPER            10      94.6   96.1         95     111
 310     ARC AIR GOUGER              2     103.8  106.6         41      50
 505     CUT-OFF WHEEL OPER          3      98.0   98.0         39      39
 340     SQUEZ/JOLT MOLDER OP        5      91.5   94.2         34      46
 265     LABORER                     7      87.9   90.0         29      39
 433     CORE ROOM WORKER            7      87.8   88.6         28      32
 422     NO-BAKE CORE OPER           5      87.4   87.4         19      19
 281     STAND STONE GRINDER         2      94.4   94.4         18      18
 368     MELTER/POURER               3      90.7   95.7         18      32
 467     WHELLABRATOR OPER           3      88.0   88.4         12      13
 303     ARC WELDER/A                3      87.0   87.2         10      11
 279     SWING GRINDER OPER          1      92.7   92.7          7       7
 421     SHELL CORE OPERATOR         1      87.5   88.6          3       4



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TOTAL NUMBER OF PERSONNEL                                  52
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (MEAN)             52
TOTAL NUMBER OF PERSONNEL WITH LEQ > 75 (W.C.)             52
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (MEAN)             27
TOTAL NUMBER OF PERSONNEL WITH LEQ > 90 (W.C.)             27
LEVEL WEIGHTED POPULATION (MEAN)                          361.0
LEVEL WEIGHTED POPULATION (W.C.)                          426.2

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

              PERSONNEL NOISE EXPOSURE AND IMPACT AVERAGES

                  THRESHOLD LEVEL          = 90.0 DBA
                  8-HR PERMISSIBLE LEVEL = 90.0 DBA
                  EXCHANGE RATE            = 5 DBA

SIC CODE =  332             PLANT NO. =  7            NO DATES SPECIFIED

 JOB      JOB DESCRIPTION         NO. OF     SOUND LEVEL    DAILY NOISE DOSE
CODE                              PERS.      MEAN   W.C.     MEAN     W.C.

 310      ARC AIR GOUGER             2      102.3  105.1     5.51     8.16
 505      CUT-OFF WHEEL OPER         3       96.3   95.3     2.40     2.40
 275      PN GRINDER OPER           10       92.5   94.0     1.42     1.75
 281      STAND STONE GRINDER        2       92.3   92.3     1.38     1.38
 279      SWING GRINDER OPER         1       90.3   90.3     1.04     1.04
 368      MELTER/POURER              3      <90.0   94.0     0.79     1.73
 340      SQUEZ/JOLT MOLDER OP       5      <90.0  <90.0     0.57     0.84
 265      LABORER                    7      <90.0  <90.0     0.21     0.34
 303      ARC WELDER/A               3      <90.0  <90.0     0.11     0.12
 422      NO-BAKE CORE OPER          5      <90.0  <90.0     0.05     0.05
 421      SHELL CORE OPERATOR        1      <90.0  <90.0     0.00     0.51
 433      CORE ROOM WORKER           7      <90.0  <90.0     0.00     0.41
 467      WHELLABRATOR OPER          3      <90.0  <90.0     0.00     0.41




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               TOTAL NUMBER OF PERSONNEL           =      52
               TOTAL NUMBER OVEREXPOSED (MEAN) =      18
               TOTAL NUMBER OVEREXPOSED (W.C.) =      23

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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1119	PN CONE GRINDER	5	97.0	99.5	46	7.7	0.147
1438	INDUCT. FURNACE	2	92.0	97.7	38	5.6	0.108
1535	VENTILATION	1	82.0	82.0	95	4.3	0.083
1542	COMPRESSED AIR	5	94.2	96.0	34	3.9	0.075
1120	PN WHEEL GRINDER	1	95.3	95.3	10	3.5	0.068
1338	SQUEZ/JOLT MOLDER	6	99.0	102.6	25	3.4	0.066
1160	ARC AIR GOUGERS	2	106.0	108.8	28	3.2	0.061
1508	CUT-OFF WHEEL	2	100.0	100.0	8	2.9	0.056
1544	BACK. ONLY CONTR.	0	83.9	85.4	33	2.8	0.054
1486	SHAKEOUT	3	92.7	96.2	30	2.7	0.051
1118	PN DISC GRINDER	2	102.5	104.6	36	2.4	0.047
1443	LADLE PRE-HEAT	2	91.0	92.4	50	1.8	0.035
1517	STAND STONE GRIND	1	96.0	96.0	2	1.7	0.033
1552	BACK. ONLY CONTR.	0	73.9	75.4	42	1.2	0.022
1512	SWING GRINDER	2	94.0	94.0	1	0.8	0.016
1442	FURNACE	1	88.0	88.0	20	0.8	0.015
1373	SANDMULLER	1	92.0	92.0	1	0.7	0.014
1451	NO-BAKE CORE	1	96.0	96.0	5	0.7	0.014
1166	WELDING/ARC	3	83.0	86.5	3	0.7	0.014
1492	SHAKEOUT TABLE	4	101.5	104.9	21	0.7	0.013
1334	BACK/MOLDERS	1	84.8	84.8	9	0.4	0.008

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ENVIRONMENTAL PROTECTION AGENCY                         BBN JOB NO.   9635

                         EQUIPMENT NOISE CONTROL PRIORITY

                         THRESHOLD LEVEL         = 90.0 DBA
                         8-HR PERMISSIBLE LEVEL  = 90.0 DBA
                         EXCHANGE RATE           = 5 DBA

SIC CODE =  332              PLANT NO. =  7            NO DATES SPECIFIED

EQUIP.       EQUIPMENT           NO.OF    MEAN     W.C.    NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION          UNITS     LJ       LJ     PERS.    INDEX     P.I.

 1119    PN CONE GRINDER           5      97.0     99.5     10        5.6    0.310
 1120    PN WHEEL GRINDER          1      95.3     95.3     10        4.4    0.245
 1506    CUT-OFF WHEEL             2     100.0    100.0      3        3.0    0.167
 1160    ARC AIR GOUGERS           2     106.0    108.8      2        2.0    0.111
 1517    STAND STONE GRIND         1      96.0     96.0      2        2.0    0.111
 1512    SWING GRINDER             2      94.0     94.0      1        1.0    0.056
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ENVIRONMENTAL PROTECTION AGENCY BBN JOB NO. 9635

EQUIPMENT NOISE IMPACT AVERAGES

EPA CRITERIA

SIC CODE = 332 PLANT NO. = 7 NO DATES SPECIFIED

EQUIP. CODE	EQUIPMENT DESCRIPTION	NO.OF UNITS	MEAN LJ	W.C. LJ	NO.OF PERS.	PRIORITY INDEX	NORM. P.I.
1103	PNEUMATIC GRINDER	8	98.2	100.6	92	13.6	0.262
1434	FURNACE	5	90.8	94.9	108	8.2	0.158
1158	WELD/BURN/GOUGING	5	92.2	95.5	31	3.9	0.075
1333	MOLDER	7	97.0	100.6	34	3.8	0.074
1484	SHAKEOUT/DUMPOUT	7	97.7	101.2	51	3.3	0.064
1505	CUT-OFF WHEEL	2	100.0	100.0	8	2.9	0.056
1510	ELECTRIC GRINDERS	3	94.7	94.7	3	2.5	0.049
1371	MULLER	1	92.0	92.0	1	0.7	0.014
1448	CORE OVEN	2	94.5	94.5	5	0.7	0.014

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ENVIRONMENTAL PROTECTION AGENCY                          BBN JOB NO.   9635

                  EQUIPMENT NOISE CONTROL PRIORITY AVERAGES

                     THRESHOLD LEVEL          = 90.0 DBA
                     8-HR PERMISSIBLE LEVEL = 90.0 DBA
                     EXCHANGE RATE            = 5 DBA

SIC CODE =  332             PLANT NO. =  7            NO DATES SPECIFIED

EQUIP.       EQUIPMENT          NO.OF     MEAN     W.C.   NO.OF   PRIORITY   NORM.
 CODE       DESCRIPTION         UNITS      LJ       LJ    PERS.    INDEX     P.I.

 1103    PNEUMATIC GRINDER         6     98.2    100.6      20      10.0    0.556
 1505    CUT-OFF WHEEL             2    100.0    100.0       3       3.0    0.167
 1510    ELECTRIC GRINDERS         3     94.7     94.7       3       3.0    0.167
 1158    WELD/BURN/GOUGING         5     92.2     95.5       2       2.0    0.111
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